can effectively be applied within 5 to 6 weeks following weed emergence ctive stage of growth. Since Atrazine 4G acts primorily through the roots int upon adequate rainfall to mave the chemical into the root zone. Exrical cond

North Carolina "† Maneb asy to use fruit and INSECTICIDE REPORT be used or for 1962

l of many fungicidal seases of

); Water-g blight—

stated. In ditions favor disease, use Z Ibs. per 100 gals. here directed below, add Du Pont Spreader-quired amount of product through the filler

to 8% (4.8 to 6.4% active) by diluting and utral diluent. Use dust mixtures as soon as displace an equivalent amount of

organic fungicide soybeans, rice, ands and by many matter.

WARNING! POISONOUS IF NHALED OR SWALLOWED. M RITATION OF EYES, NOSE, TH KIN. Avoid breathing dust or spray

d lat mist. Avoid contact with skin, eyes ter in and clothing.

ntil plan

11:1962

# ANTIDOTE

tions. Do n If swallowed, immediatel at (Cercospot valle or whites of eggs disease conditions til vomit fluid is every 3 to 5 and washing. disease condition diseases—Apply what il vomit fluid is e threatens):

diseases—Apply with 0 days.

y mildew. anthracnose (also
): Downy mildew, anthracnose, Cercospora leaf spot a
lants begin to run or when disease threatens; repeat
severe conditions shorten intervals to 3 to 5 days. iquash (In Texas): Downy mildew—Apply as soon lens; repeat at 7- to 10-day intervals as needed.

er ocre prior to, or within, 5 to 6 weeks following w nyord gross, green foxtoil, crobgrass, lombsquorters, p onger residuol oction and for control of more resistant timents use 6-9 lbs. of Atrazine 4G per 1,000 sq. ft.

East of the Rocky Mountains: For control of woody spe rch, box elder, cedar, wild cherry, dogwood, elderberry, l, hickory, locust, maple, mulberry, oak, pine, poplar, red gum, and willow, make basal, grid or broadcast application be made at any time of year, but for best results, apply

spread one tablespoonful on the ground (to cover an are f each brush cluster.

rush, apply 1 teaspoonful every three feet in a grid patt

tion, apply at the rate of 50 to 75 lbs. per acre. Solid soils are controlled with rates as low as 40 lbs. per a

lbs. of Atrazine 4G per acre according to the soil g operatian in 12-14 inch bonds centered over the roy ded for broadcost treatments since the orea treated in bo

#### GENERAL INFORMATION

led Thiram Seed Protectant is recommended for the treatment of field m, millet, soybeans, rice, peanuts, sugar beets, grasses, legumes, gladio-table seeds listed herein. "Arasan" 50-Red when used as directed will and yields by reducing losses from seed decay, damping-off and seedconditions, 3 to 5 days when disease conditions are severe. Do not apply with Remove residues from head lettuce by stripping and trimming, and from lead by washing or other effective means.

Lime Beaus: Downy mildew—Apply when disease first appears (about m 4 to 7-day intervals as needed.

Onless: Downy mildew, purple blotch (blight) and blast (Botrytis leaf blifters spots appear; repeat weekly as needed. Add Du Pont Spreader-Sticker.

first spots appear; repeat weekly as needed. Add Du Pont Spreader-Sticker. (omit petal-fall spray if only brown rot is present). Add Du Pont Spreader-Sticker. Peaches (Pacific States and B. C.) and Nectorines (California): Shot-hole (leaf curl (California only), apply dormant and popcorn sprays. For brown apply at pink bud and 25% to 75% of full-bloom (in Pacific Northwest and B spray). Use 1½ to 2 lbs. per 100 gals. (6 to 8 lbs. per acre). For fruit brown ro apply 2 lbs. per 100 gals. (about 10 lbs. per acre) 4 weeks before harvest, or es found on green fruit, and repeat at 7- to 14-day intervals as needed. Add Sticker. Do not apply to nectarines later than 14 days before harvest. If applie 14 days of harvest, remove residues by brushing; do not apply later than 2 days Apricots (In California): Brown rot and shot-hole (fungus)—Use 2 lbs. at reand full-bloom. Green or Jacket rot—Use 2 lbs. at full-bloom and petal-fall. Grapes (In Great Lakes Area): Black rot—Spray just before bloom, just afte days later.

days later.

Rosses: Cercospora leaf spot (Texas), Rust (California), Black spot—Use 1 first leaves unfold; repeat weekly as needed. Add Du Pont Spreader-Sticker.

Compatibility: "Manzate" purpose the second of the second of the terms of the terms of the terms of the second of the second of the terms of the second of the secon calcium arsenate, roteno to the terms of the arising out of un

thereto the By DIRECTIONS NOTICE

For Alfalfa — For the d wash sk control of the Alfalfa Weevil Fertilizer — Heptachlor Mixtur weeds, s prepared by impregnating the f rtilizer itself with pesticide. This nament

aterial should be applied broadcas the rate of 550 lbs. per acre etween October 15 and Novembe

r 15. Earlier application not the concer effective. Later application r each typ results in residue contam

Do not use this product Tobacco Plan Use as a fall of jury to young rginia, Tennessee, a cast 40 days before see good rain to allow proper plant bed and immediately fo any other pur 9 qts. in 100 of 100 gals.

METHODS OF APPLICATION
Only 100 sq. ft. at a time. Add required amount of VP
dosage rates above), fill with water, stir and distribute
foot area. Immediately sprinkle area with enough add Sprinki to spri measu

Mix amount of VPM Soil Fumigant required to treat 10 y uniformly with a proportioner having a ratio of about 1: a crough additional water to wet surface thoroughly.

only on a calm day. Wet area by running sprinklers for 5 to

AFTER APPLICATION

See cases where soil surface watering is specified above, it is accommodate soil surface watering is specified above, it is accommodate soil surface watering is specified above, it is accommodate soil surface watering is specified above. The surface soil such as straight sand, gravel, or very loose organic soils, special overing with a tarpaulin may be required.

The surface soil surfac

ntities of seed—Use any suitable commercial dust trea irectly with the seed in the planter box. For Small Quant (Rotary Drum or Small Container)—Fill unit not mor to "Arasan" 50-Red; rotate unit slowly until red company of "Arasan" 50-Red over the seed surface until red color is imparted to the seed. Add rema dand stir as outlined above.

treated at any time after being well cured. Treat peanuts p For rates, follow table below.

Control of Bindweed (morning glory): Use as spot treatment for in treat an area somewhat larger than the surface growth to kill extend rate of 4 to 6 lbs. per 1000 sq. ft. (of area actually treated). Disc fe

## THE BULLETIN

of the

North Carolina Department of Agriculture

L. Y. BALLENTINE, Commissioner North Carolina State Library

Raleigh

June, 1963

Number 172



# **North Carolina**

# INSECTICIDE REPORT

for

January 1 - December 31, 1962



# THE BULLETIN

of the

North Carolina Department of Agriculture
Raleigh, N. C.

L. Y. BALLENTINE, Commissioner
JOHN L. REITZEL, Assistant Commissioner
E. W. CONSTABLE, State Chemist

Number 172

June, 1963

# **ABOUT OUR COVER PICTURE**

The cover picture places emphasis on "label reading". Two main points are stressed. Care should be taken not only in reading the instructions for use, but the precautionary warnings should be thoroughly understood and heeded. Warnings concerning the health of the user, as well as those limiting the application dates before harvest of some of the pesticides, should be read carefully and followed closely. Failure to do so could be disastrous to the farmer and his market, and adversely affect the consumer.

Labels on pesticides are expensive pieces of literature. In many cases it takes five to six years and cost one to three million dollars to develop the product. Instructions that set out its uses and safeguards are part of that development. Legal safeguards that test and specify those instructions take additional time and money.

Estimates of the destruction caused by agricultural pests alone in the United States range between 8 and 15 billion dollars annually, despite the widespread use of the best control practices now available. Without economic poisoning agents these pests would definitely threaten our existence. Pesticides are of incalculable value as tools in modern pest control, but the safety and usefulness of these economic poisoning agents depend solely on strict adherance to the instructions contained on their labels.

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Chemical and Common Names
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No. 1 to 1
ZAVILE .
Thailiam Sulfate

# Inspection and Analysis of Economic Poisons

Economic poisons or pesticides cover a large number of materials and mixtures intended for destroying, controlling or repelling pests such as insects, weeds and other noxious plants, predatory animals and birds, soil-infesting pests such as nematodes, algae, snails and bacteria. Other examples are disinfectants, antiseptics and fungicides for use other than on living man or other animals, defoliants, various repellents, fly paper and other adhesive products whose action goes beyond simple mechanics, moth proofers, wood preservatives other than common paints, mildew controls, and seed fumigants and disinfectants.

An adequate and reliable supply of these products is as indispensable as is fertilizer in the production of food and fiber crops. Weed killers and defoliants are important adjuncts. The preservation of many products in storage and the control of domestic and industrial pests which affect both the health and welfare of human beings and animals are likewise dependent on such materials.

While encouraging the development and distribution of reliable products to serve these needs, and with due regard for public health and welfare, it is the purpose of the economic poisons laws (the North Carolina Insecticide, Fungicide and Rodenticide Act of 1947, G. S. Article 4A, Chapter 106) to protect the public from adulterated, misbranded, worthless and dangerous products, and legitimate manufacturers from unscrupulous competition. Among other requirements, the law authorizes inspections, analyses of official samples taken from products offered for sale within the state and publication of results. With other pertinent information, there is given in this issue of The Bulletin a list of registrants, a summary of registrations and detailed results of analyses of official samples taken throughout the state by inspectors of the department for the calendar year 1962. Included also are the North Carolina Aerial Crop-Dusting Law, regulations and registrants under that law, for 1962.

Before any brand of economic poison can be legally offered for sale in the state, it is required that it be registered with the Department of Agriculture. Application forms, furnished by the department, must be submitted in triplicate with copy of all labeling and claims. Applications must be accompanied by an inspection fee of ten dollars per brand and grade, payable to the North Carolina Department of Agriculture. All registrations expire December 31 of each year and are subject to re-registration with annual payment of inspection fees. Requirements are given in fuller detail in the "Brief of North Carolina Insecticide Law" on pages 7 and 8. Copies of the law and related regulations are available on request.

A statewide inspection service is maintained for the collection of official samples of economic poisons from farms, other users and dealers. Individual requests for inspections are followed up promptly.

Samples are sent to the department's laboratories for analysis and as soon as this work is completed, individual reports are forwarded to manufacturers, dealers and users. As a further means of reporting, an issue of The Bulletin covering a year's work as exemplified herewith, is published annually.

The economic poisons law gives control officials certain discretionary authority in dealing with borderline cases. The earnest cooperation of a great majority of manufacturers and dealers has been a valuable asset in the administration of the law.

Cooperative work by staff members of the North Carolina Experiment Station and Extension Service has been mutually beneficial and most helpful. Credit also is due members of the laboratory section for the highly satisfactory manner in which the analytical work has been carried out: H. A. Miller, Assistant State Chemist; Henry W. Barnes, Jr., William Buffaloe, Harold Jackson, Thomas Vick, Chemists; Mrs. Frances Liles, Secretary; S. E. Berkshire, George A. Brown, Jr., T. E. Carriker, Jr., J. W. Davis, H. C. McPhail, James R. Stevens, Inspectors; William Morgan, Donald Smith, Laboratory Helpers.

and dangerous products, and legitlmals manufacturers from anscrupulous

# Brief of North Carolina Insecticide Law

Commissioner of Agriculture, Raleigh, North Carolina.

Administrative Officer

Required to Appear on Package

Labels

- 1. The name and address of the guarantor.
- 2. The brand name or trademark.
- 3. The net weight or measure.
- 4. A guaranteed analysis statement showing:
  - a. The name and percentage of each active ingredient.
- b. The total percentage of inert ingredients.
- 5. Instructions for use, adequate for the protection of public.
- A warning or caution statement adequate to prevent injury.
- 7. For economic poisons highly toxic to man:
  - a. The skull and crossbones.
  - The word "Poison" in red, on distinctly contrasting background.
  - c. An antidote for the poison.
- When arsenic is present—the percentages of the total and of the water-soluble arsenic separately and as elemental (metallic) arsenic.

#### Other General Requirements:

 Strength and quality must not fall below that professed or claimed. General Requirements

- 2. No false or misleading statement, design or other representation is permissible.
- 3. Imitations are not permitted.
- 4. Labeling may not refer to registration.
- 5. Labeling shall be legible and understandable.
- Claims or directions for use may not deviate in substance, or composition vary, from representations made on registering.
- 7. Economic poisons must be sold in the registrant's or manufacturer's original package. If repackaged for sale, it loses its original identity and qualifies as a new product. As such it is subject to registration and all other provisions of the law. Responsibility rests on the repackaging agent.

8. Economic poisons in powdered form of white or light color require distinct further coloring for safety.

Registration

Each brand and grade of economic poisons must be registered prior to sale (application forms are furnished by the department), subject to renewal annually, January 1st. Duplication of registration by secondary sellers is not required.

Application must be accompanied by full information (see package labeling above), including specimen of labeling, all claims, and, if called for, certain additional data when necessary in qualifying the product.

Inspection Tax An annual inspection tax of \$10.00 for each brand and each grade is required.

Method of Paying Inspection tax must accompany application for registration, payable to the North Carolina Department of Agriculture.

Refusal or Cancellation of Registration Registration is subject to refusal or cancellation for cause and upon hearing.

Stop-Sale Orders Goods not measuring up to requirements are subject to Stop-Sale Orders.

Short Weight

Short weight, in addition to above, is subject to penalty.

# Exempt From Penalties of Law Are:

Exemptions

- 1. Carriers engaged in legal transporting.
- 2. Public official while performing official duties.
- 3. Manufacturers and shippers of products properly identified for experimental use only.
- Persons shown to be proceeding in good faith on guarantees and representations given by others. The original guarantor then is liable.

NOTE: Copies of the economic poisons law may be obtained upon request to the Inspection Division, North Carolina Department of Agriculture, Raleigh, North Carolina.

# Economic Poisons Registrants, 1962

ABERDEEN EXTERMINATORS
P. O. Box 493
Aberdeen, North Carolina

ACELINE PRODUCTS CORP. P. O. Box 236 Rochester 1, New York

ACME FERTILIZER CO. P. O. Box 98 Acme, North Carolina

ACME QUALITY PAINTS, INC. 8250 St. Aubin Avenue Detroit 11, Michigan

AERO-MASTER, INC. 325 W. Pacific Avenue St. Louis 19, Missouri

AGRICULTURAL SPECIALTIES Star-Bar Div. 12200 Denton Drive Dallas 34, Texas

AIRKEM, INC. 241 East 44th Street New York 17, New York

AIROSOL COMPANY, INC. 525 N. 11th Street Neodesha, Kansas

ALCATRAZ COMPANY, INC., THE 1900 Ellen Road Richmond 30, Virginia

ALCO CHEMICAL CO. 19220 Pioneer Blvd. Artesia, California

ALFORD HOME PRODUCTS P. O. Box 239 Middlesex, North Carolina

ALLEN-CROWL CO. 1559 Allentown Rd. Lima, Ohio

ALLIED CHEMICAL CORP.
General Chemical Div.
40 Rector Street
New York 6, New York

ALLIED CHEMICAL AND DYE CORP. Plastics & Coal Chem. Div. 40 Rector Street New York 6, New York

ALLIED DRUG PRODUCTS CO. P. O. Box 871 Chattanooga 1, Tennessee

ALLIED PRODUCERS AND SUPPLY CO. P. O. Box 3421 Charlotte 3, North Carolina

ALL STAR MILLS, INC. P. O. Box 271 Albemarle, North Carolina

AMCHEM PRODUCTS, INC. Ambler Pennsylvania

AMERICAN CYANAMID CO. P. O. Box 400 Princeton, New Jersey

AMERICAN MINERAL SPIRITS CO.
Mountain Avenue
Murray Hill, New Jersey

AMERICAN PAPER AND PLASTIC PROD-UCTS, INC. 4425 N. Port Washington Road Milwaukee 12, Wisconsin

AMERICAN OIL CO. 910 S. Michigan Avenue Chicago 80, Illinois

AMERICAN SCIENTIFIC LABORATORIES, INC. P. O. Box 1288 Madison 1, Wisconsin

AMERICAN STERILIZER CO. 2424 W. 23rd Street Erie, Pennsylvania

A-M-R CHEMICAL COMPANY, INC. 985 East 35th Street Brooklyn 10, New York

AMWAY SALES CORP. 7575 E. Fulton Road Ada, Michigan

ANDROC CHEMICAL CO. 7301 W. Lake Street Minneapolis 26, Minn.

ANIMAL REPELLENTS, INC. 980 Ellicott Street Buffalo 9, New York

A-PENN OIL CO. P. O. Box 191 Butler, Pennsylvania

APEX CHEMICAL CO. 617 Salem Street Apex, North Carolina

ARMOUR AGRICULTURAL CHEMICAL CO. P. O. Box 900 Greensboro, North Carolina

ARMOUR AND CO. Soap Division 1355 West 31st Street Chicago 9, Illinois

ARNOTT CHEMICAL AND EXTERMINAT-ING CO. 249 Mass. Avenue Indianapolis 4, Indiana

ASPDEN ASSOCIATES, INC. 1003 Battleground Avenue Greensboro, North Carolina

ATLA CHEMICAL COMPANY, INC. 415 S. Spring Street Greensboro, North Carolina

ATLANTIC AND PACIFIC TEA CO., THE GREAT 2024 Thrift Road Charlotte, North Carolina

ATLAS AGRICULTURAL CHEMICALS, INC. P. O. Box 169 Waynesboro, Georgia

AVRIL, INC.
Third & Greenwich Sts.
Reading, Pennsylvania

BABBITT, B. T., INC. 20 Broadway Albany 1, New York BARCO MANUFACTURING COMPANY, INC. 340 Main Street Worcester 8, Mass.

BARKER, MOORE AND MEIN COMPANY, INC. P. O. Box 12 Lebanon, Pennsylvania

BAUER AND BLACK Division of The Kendall Company 309 W. Jackson Blvd. Chicago 6, Illinois

BEN VENUE LABORATORIES, INC. 270 Northfield Road Bedford, Ohio

BERLOU MANUFACTURING CO. 421 Monroe Street Marion, Ohio

BEST EXTERMINATING SERVICE, INC. 317 W. Pettigrew St. Durham, North Carolina

BIO-LAB, INC. P. O. Box 89 Decatur, Georgia

BISSELL, INC. 919 - 18th St., N.W. Washington 6, D. C.

BLACK LEAF PRODUCTS CO. 6147 N. Broadway Chicago 40, Illinois

BLACK MAGIC CO. 509 Green St., Box 466 Valdosta, Georgia

BLACK PANTHER COMPANY, INC. P. 0. Box 690 Sanford, North Carolina

BLUE MAGIC CO. 509 S. Lodge Street Wilson, North Carolina

BOHLENDER PLANT CHEMICALS, INC. Tipp City Ohio

BON AMI COMPANY, INC., THE 445 Park Avenue New York 22, New York

BONIDE CHEMICAL CO. 382 N. Genesee Street Utica 4, New York

BORDERLAND PRODUCTS, INC. 560 Fulton Street Buffalo, New York

BOYER CHEMICAL CO. 1611 Church Street Evanston, Illinois

BOYLE-MIDWAY, INC. 685 Third Avenue New York 17, New York

BUCKEYE CHEMICAL AND SPECIALTY 49 East 21 Street New York 10, New York

BURPEE, W. ATLEE CO. 18th St. & Hunting Park Avenue Philadelphia 32, Pa. BURRIS CHEMICAL CO. Stark Industrial Park Charleston, South Carolina

CALIFORNIA CHEMICAL CO. Ortho Division Richmond 4, California

CALUMET AND HECLA, INC. Calumet Division 1 Calumet Avenue Calumet, Michigan

CAPE FEAR CHEMICALS, INC. P. O. Box 567 Elizabethtown, North Carolina

CAPITOL CHEMICAL CO. 3255 Prospect Avenue, N. W. Washington 7, D. C.

CARAJON CHEMICAL COMPANY, INC. P. O. Box 167 Fremont, Michigan

CARBOLA CHEMICAL COMPANY, INC. Natural Bridge New York

CARBOLINEUM WOOD PRESERVING CO. 6683-N. 40th St. Milwaukee, Wisconsin

CARDINAL PRODUCTS, INC. P. O. Box 1611 Durham, North Carolina

CAROLINA CHEMICAL CORP. P. 0. Box 70 Wilson, North Carolina

CAROLINA CHEMICALS, INC. P. 0. Box 128 Columbia Airport West Columbia, South Carolina

CAROLINA FEED STORE 279 E. Main Avenue Gastonia, North Carolina

CAROLINA PACKING HOUSE SUPPLIES, INC.
Green Sea Road
Tabor City, North Carolina

CARROLL CHEMICAL CO., THE 2301 Hollins Street Baltimore 23. Maryland

CARTER'S DRUGS AND SEEDS 31 Barnard Street Savannah, Georgia

CARTER INSECTICIDE AND CHEMICAL COMPANY, INC. P. O. Box 209 Wallace, North Carolina

C-B DRUG CO. 2219 Freedom Drive Charlotte 8, North Carolina

CENTER CHEMICAL CO. P. O. Box 1888 Atlanta, Georgia

CENTRAL CHEMICAL CORP. P. O. Box 310 Hagerstown, Maryland

CHAMBERS-GODFREY MANUFACTURING
CO.
302-04 Broadway
Martin, Tennessee

CHAPMAN CHEMICAL CO. 416 Brooks Road P. O. Box 3158—Mallory Sta. Memphis 9, Tennessee

CHAPMAN, M. A. AND SON P. O. Box 691 Canton, North Carolina

CHASE PRODUCTS CO.
19th & Gardner Road
Broadview, Illinois

CHEMAGRO CORP.
P. O. Box 4913
Kansas City 20, Missouri

CHEMCO INDUSTRIALS, INC. P. O. Box 1772 Raleigh, North Carolina

CHEMICAL CORPORATION OF AMERICA P. O. Box 3577 Tallahassee, Florida

CHEMICAL AND EQUIPMENT SALES AND SERVICE CO. P. O. Box 135 Charlotte 1, North Carolina

CHEMISTRY HALL LABORATORIES P. O. Box 255 Bradenton, Florida

CHEMWAY CORP.
Fairfield Road
Mountain View
Wayne, New Jersey

CHESTER CHEMICAL CORP. 2732 6th Avenue, S. St. Petersburg, Florida

CHIPMAN CHEMICAL COMPANY, INC. Bound Brook New Jersey

CLARK & PROCTOR TURPENTINE COM-PANY, INC. 331-349 Worth Street Fayetteville, North Carolina

CLEAN HOME PRODUCTS, INC. 2805 Locust Street St. Louis 3, Missouri

CLEARY CORP., W. A. P. O. Box 749 New Brunswick, New Jersey

CLICK CHEMICAL CORP. 601 S. Columbus Avenue Mount Vernon, New York

CLINTON NURSERIES
Boston Post Road
Clinton, Conn.

COAHOMA CHEMICAL COMPANY, INC. P. O. Box 728 Clarksdale, Mississippi

COASTAL CHEMICAL CORP. 2113 Dickinson Avenue Greenville, North Carolina

COLGATE-PALMOLIVE CO. 300 Park Avenue New York 22, New York

COLONIAL PRODUCTS, INC. 6207 Georgia Avenue West Palm Beach, Florida COLONIAL STORES, INC. 215 Lawyers Bldg. Greenville, South Carolina

COMET MANUFACTURING CORP. 688 Spring Street N. W. Atlanta 8, Georgia

COMMON SENSE MANUFACTURING COM-PANY, INC. 1392 Niagara Street Buffalo 13, New York

CONSAN CHEMICAL PRODUCTS Michigan Tool Company 7125 E. McNichols Rd. Detroit 12, Michigan

CONSOLIDATED PAINT AND VARNISH CORP. The East Ohio Building Cleveland 14, Ohio

COOK CHEMICAL CO. 2500 Summit Street Kansas City, Missouri

COOPER, WILLIAM AND NEPHEWS, INC. 1909 N. Clifton Avenue Chicago 14, Illinois

COUGHLAN, G. N. CO. 29 Spring Street West Orange, New Jersey

COWLEY, S. L. & SONS MANUFACTURING CO. 708 W. McAlester Street Hugo, Oklahoma

CRE-O-TOX CHEMICAL PRODUCTS CO. 2670 Broad Avenue Memphis, Tennessee

CUTTER LABORATORIES, INC. Fourth & Parker Sts. Berkeley 10, California

DALY-HERRING CO. Adkin & University Sts. Kinston, North Carolina

DARWORTH INC.
Cuprinol Division
P. O. Box 308
Simsbury, Conn.

DAUBERT CHEMICAL CO. 4700 S. Central Avenue Chicago 38, Illinois

DAVIES-YOUNG SOAP CO., THE 705 Albany Street Dayton 1, Ohio

D-CON COMPANY, INC., THE 1450 Broadway New York 18, New York

DESOTO CHEMICAL COMPANY, INC. P. O. Box 70 Arcadia, Florida

DETTELBACK PESTICIDES CORP.
4103 Peachtree Rd., N.E.
Atlanta 19, Georgia

DIAMOND ALKALI CO. 300 Union Commerce Bldg. Cleveland 14, Ohio

DILL CO., THE
Washington St. & McKinley Avenue
Norristown, Pa.

DIXI CHEMICAL CO. 520 W. 31st St. Chattanooga, Tennessee

DOUGLAS CHEMICAL CO. 620 East 16th Avenue North Kansas City, Missouri

DOUGLAS CHEMICAL COMPANY, INC., THE P. O. Box 6541 Richmond, Virginia

DOW CHEMICAL CO., THE Midland Michigan

DRACKETT PRODUCTS CO., THE 5020 Spring Grove Avenue Cincinnati 32, Ohio

DUMAS MILNER CORP. P. O. Box 10027 Northside Sta. Jackson, Miss.

DUN WIN CO. 136 Elm Street S. Williamsport, Penn.

DU PONT DE NEMOURS AND COMPANY, E. I., INC. 6054 Du Pont Bldg. Wilmington 98, Delaware

EAGLE CHEMICAL CO. P. O. Box 8127 Chattanooga, Tenn.

ECONOMICS LABORATORY, INC. 914 Guardian Bldg. Saint Paul 1, Minn.

EDWARDS-COUNCILOR COMPANY, INC. 121 Colley Avenue Norfolk 10, Virginia

ELANCO PRODUCTS CO. 740 S. Alabama Street Indianapolis 6, Indiana

ELECTROLUX CORP. 235 East 42nd Street New York 17, New York

ELI LILLY AND CO. Elanco Products Co., Div. 740 S. Alabama Street Indianapolis 6, Indiana

EMPIRE LABORATORIES 700 Marietta St., N.W. Atlanta 18, Georgia

FAIRFAX BIOLOGICAL LABORATORY Electronic Road Clinton Corners, New York

FAIRFIELD CHEMICAL DIV. Food Machinery & Chemical Corp. 100 Niagara Street Middleport, New York

FAR-BEST CORP. 6715 McKinley Avenue Los Angeles 1, California

FARMERS COOPERATIVE EXCHANGE INC. P. O. Box 1069 Statesville, North Carolina

FARNAM COMPANIES, INC. P. O. Box 2151 Phoenix, Ariz. FERGUSSON, ALEX C. CO.
44 East Oregon Avenue
Philadelphia 48, Pa.

FLORIDA AGRICULTURAL SUPPLY CO. 1611 Tallevrand Avenue Jacksonville, Florida

FLY-CORD, INC. P. O. Box 2006 Savannah, Georgia

FORSHAW CHEMICALS, INC. P. O. Box 6165 Charlotte 7, North Carolina

FRANKLIN RESEARCH CO. 5134 Lancaster Avenue Philadelphia 31, Pa.

FRENCH CO., THE R. T.

1 Mustard Street
Rochester 9, New York

FRONTIER CHEMICAL CO.
Division of Vulcan Materials Co.
P. O. Box 545
Wichita, Kansas

GARDEN HOSE SPRAY COMPANY, INC. 7 Upland Road Cambridge 40, Mass.

GASTON JOHNSTON CORP. 24-64 45th Street Long Island City 3, New York

GEIGY AGRICULTURAL CHEMICALS
P. O. Box 430
Yonkers, New York

GEORGIA-CAROLINA OIL CO. P. O. Box 101 Macon, Georgia

GEORGIA GULF SULFUR CORP. Spring Creek Road
Bainbridge, Georgia

GETEM MANUFACTURING COMPANY, INC. 1261 West 42nd Street Norfolk 8, Virginia

GIBSON-HOMANS COMPANY Hutson Division Railroad & Institute St. Conyers, Georgia

GLAMORENE, INC. 175 Entin Road Clifton, New Jersey

GLAMUR PRODUCTS, INC. 1024 Montgomery Street Syracuse 3, New York

GLIDDEN CO., THE 900 Union Commerce Bldg. Cleveland 14, Ohio

CLOBE LABORATORIES
Division of Charles Pfizer and Company,
Inc.
116 Commerce Street
Fort Worth 2, Texas

GLOVER COMPANY, INC., H. CLAY 1001 Franklin Avenue Garden City, New York

GLOVER MINERAL PRODUCTS, INC. Kenbridge Virginia GRACE AND CO., W. R.
Davison Chemical Div.
P. O. Box 858
Charleston, South Carolina

GRAHAM CHEMICAL COMPANY, INC. 1407 Battleground Avenue Greensboro, North Carolina

GREAT LAKES CHEMICAL CORP.
Div. of Great Lakes Oil & Chem. Co.
753 Warner Bldg.
Washington 4, D. C.

GREEVER'S Chilhowie Virginia

GRISSMER CO., EARL 712 E. 64th St. Indianapolis, Indiana

GUARDIAN CHEMICAL CO. P. O. Box 1354 Atlanta 1, Georgia

GULF OIL CORP. P. O. Box 1519 Houston 1, Texas

GURMICO CHEMICALS, INC. P. O. Box 146 Princeton, North Carolina

GUSTAFSON MANUFACTURING COMPANY, INC. 6501 Cambridge St. Minneapolis 26, Minnesota

H AND M CHEMICAL COMPANY, INC. 43 Green Street Sumter, South Carolina

HAPPY JACK, INC. P. O. Box 325 Snow Hill, North Carolina

HARRIS PRODUCTS COMPANY, INC. P. O. Box 4 Miami Beach 39, Florida

HARRIS AND COMPANY, INC., J. M. P. O. Box 411 Roanoke, Virginia

HARRIS MANUFACTURING COMPANY, P. F. 101 W. 8th Street North Little Rock, Arkansas

HARTZ MOUNTAIN PRODUCTS CORP. 50 Cooper Square New York 3, New York

HELLER LABORATORIES. INC. A Div. of B. Heller & Co. Calumet Avenue & 40th St. Chicago 53, Illinois

HERCULES POWDER CO.
910 Market Street
Wilmington 99, Delaware

HERTRON CHEMICAL CO. 306 Clanton Road Charlotte 3, North Carolina

HERCULES POWDER CO.
Reasor-Hill Products
Synthetics Department
Jacksonville, Arkansas

HESS AND CLARK, INC.
Div. of Richardson-Merrell, Inc.
7th & Orange Sts.
Ashland, Obio

Ashland, Ohio
HILL MANUFACTURING CO.
1500 Jonesboro Road, S.E.
Atlanta 15, Georgia

HILLYARD SALES CO. 302 N. 4th St. St. Joseph 1, Missouri

HINTON AND COMPANY, INC. 67 Murray Street New York 7, New York

HOLCOMB MANUFACTURING CO., J. I. 1601 Barth Avenue Indianapolis 7, Indiana

HOLLINGSHEAD CORP., R. M. 840 Cooper Street Camden 2, New Jersey

HOLLYWOOD TERMITE CONTROL CO. 938 N. Eastern Avenue Los Angeles 63, California

HOOD CHEMICAL COMPANY, INC. Div. of Textze Chems., Inc. 215 Lawyers Bldg. Greenville, South Carolina

HOOKER CHEMICAL CORP. 666 Fifth Avenue New York 19, New York

HOT SHOT QUALITY PRODUCTS, INC. 701 N. Main Street Memphis, Tenn.

HOUSTON CO., SAM P. O. Box 662 Talladega, Alabama.

HOWERTON GOWEN COMPANY, INC. E. 11th Street Roanoke Rapids, North Carolina

HUGE COMPANY, INC., THE 884 Hodiamont Avenue St. Louis 12, Missouri

HUMBLE OIL AND REFINING CO. 15 West 51st Street New York 19, New York

HUNTINGTON LABORATORIES, INC. 970 E. Tipton Street Huntington, Indiana

HUTSON AND SONS, H. G. P. O. Box 2190 Atlanta 1, Georgia

HUTTIG SASH AND DOOR CO. 1206 S. Vandeventer Avenue St. Louis 10, Missouri

HYDROPONIC CHEMICAL COMPANY, INC. P. O. Box 97-C Copley, Ohio

HYSAN PRODUCTS CO. 919 West 38th Street Chicago 9, Illinois

INDEPENDENT EXTERMINATING CO. OF N.C. 210 S. Rutherford Street Wadesboro, North Carolina INDUSTRIAL FUMIGANT CO.
923 State Line
Kansas City 1, Missouri

INSECT CONTROL SALES AND SERVICE P. O. Box 152 Candor, North Carolina

IRWIN-WILLERT CO. 4044 Park Avenue St. Louis 10, Missouri

JOHNSON AND SON, INC., S. C. 1525 Howe Street Racine, Wisconsin

JORO, INC. P. O. Box 411 Roanoke, Virginia

KAY CHEMICAL CO. 131 W. High Street High Point, North Carolina

KEEL PEANUT CO.
P. O. Box 878
Greenville, North Carolina

KERR CHEMICALS, INC. 1001 Northwest Highway Des Plaines, Illinois

KING CHEMICAL CO. 2342 South Lauderdale St. Memphis 6, Tenn.

KING RESEARCH, INC. 114 - 12th Street Brooklyn 15, New York

KLENZADE PRODUCTS
Division of Economics Laboratories, Inc.
P. O. Box 1020
Beloit, Wisconsin

KOLKER CHEMICAL CORP. 600 Doremus Avenue Newark 5, New Jersey

KOPPERS COMPANY, INC. Tar Products Division 430 Park Avenue New York 22, New York

K-R-O CO. 19½ N. Limestone Street Springfield, Ohio

LABCO PET PRODUCTS CO. 281 Franklin Street Boston 10, Mass.

LAKE CHEMICAL CO. P. O. Box 231 Calumet, Michigan

LATHAN CHEMICAL PRODUCTS 503 Neuse Street Oriental, North Carolina

LEGEAR, INC., DR. 4161 Beck Avenue St. Louis 16, Missouri

LESTER LABORATORIES, INC. P. O. Box 4897 Atlanta 2, Georgia

LETHELIN PRODUCTS COMPANY, INC. 15 MacQuesten Parkway, South Mount Vernon, New York LEYDEN LABORATORIES
One Bala Avenue
Bala-Cynwyd, Pa.

LINCK COMPANY, INC., O. E. Route 46 and Valley Road Clifton, New Jersey

LINEN WHITE PRODUCTS COMPANY, INC. P. O. Box 248 Clinton, North Carolina

MCCLELLAN VETERINARY LABORATORIES
P. 0. Box 32215
Los Angeles 32, California

MCCORMICK AND COMPANY, INC.
McCormick Building
Baltimore 2, Maryland

MCKESSON LABORATORIES
P. O. Box 548
Bridgeport, Connecticut

MCLAUGHLIN GORMLEY KING CO. 1715 Fifth St., S.E. Minneapolis 14, Minn.

MABEX CO., THE
Umbria & Lemonte Streets
Philadelphia 27, Pa.

MAHAFFEY CO. P. O. Box 8145 Greenville, South Carolina

MAINTENANCE SUPPLY SERVICE CORP. P. O. Box 498 Huntersville, North Carolina

MALLINCKRODT CHEMICAL WORKS
P. O. Box 685
New York 8, New York

MARK LABORATORIES, INC. 7007 Kelly Street Pittsburgh 8, Pa.

MARTIN, C. J. AND SONS 1181 Airport Blvd. Austin 2, Texas

MASTER PRODUCTS CO. P. O. Box 531 Fayetteville, North Carolina

MASURY-YOUNG CO. 76 Roland Street Boston 29, Mass.

MAXWELL INSECTICIDE COMPANY, INC. P. O. Box 5627 Raleigh, North Carolina

MEHERRIN AGRICULTURAL AND CHEM-ICAL CO. Severn North Carolina

MERCK AND COMPANY, INC.
Rahway
New Jersey

MICHIGAN CHEMICAL CORP. 500 N. Bankson Street St. Louis, Michigan

MIDLAND LABORATORIES 210-220 Jones Street Dubuque, Iowa

MIKE, INC. P. O. Box 92 Newland, North Carolina MILLER CO., B. E. P. O. Box 127 Hancock, Maryland

MILLER CHEMICAL AND FERTILIZER CORP. 3006 W. Cold Spring Lane Baltimore 15, Maryland

MILLS-PEARSON CORP.
Dianol Division
2621 24th St. N.
St. Petersburg 33, Florida

MOLONY FERTILIZER CO. P. O. Box 314 Charleston, South Carolina

MOMAR, INC. 1830 Ellsworth Industrial Dr., N.W. Atlanta, Georgia

MONA INDUSTRIES, INC. P. O. Box 1786 Paterson 17, New Jersey

MONSANTO CHEMICAL CO. 800 North Lindbergh Street St. Louis 66, Missouri

MORTON CHEMICAL CO. Agriculture Div., Research Dept. 110 N. Wacker Dr. Chicago 6, Illinois

MOTOMCO, INC. 89 Terminal Avenue Clark, New Jersey

MUTUAL PRODUCTS CO. 509 North Fourth St. Minneapolis, Minn.

NALCO CHEMICAL CO. 6216 W. 66th Pl. Chicago 38, Ill.

NATCON CHEMICAL COMPANY, INC. Lexington & Revere Avenues Bethpage, Long Island, New York

NATIONAL CHEMSEARCH CORP. P. O. Box 10087 Dallas 7, Texas

NATIONAL HOG MEDICINE CO. 804 N. West Street P. O. Box 1634 Raleigh, North Carolina

NATIONAL LABORATORIES 4934 Lewis Avenue Toledo 12, Ohio

NATIONWIDE CHEMICAL COMPANY, INC. 2209 Fowler Street Fort Myers, Florida

NIAGARA CHEMICAL DIV. Food Machinery and Chem. Corp. P. O. Box 1709 Jacksonville 1, Florida

NIP-CO MANUFACTURING, INC. 200 Main Street New Rochelle, New York

NORDA ESSENTIAL OIL AND CHEMICAL COMPANY, INC. 601 West 26th Street New York 1, New York

NOTT MANUFACTURING COMPANY, INC. 200 S. Water St. Poughkeepsle, New York

NOWLAND CO., THE GEORGE H. 538 E. 5th St. Cincinnati 2, Ohio

NUODEX PRODUCTS COMPANY, INC. 110 E. 42nd St. New York 17, New York

NUTRILITE PRODUCTS, INC. 5600 Beach Boulevard Buena Park, California

ODOR-AIRE, INC. 1019 E. 2nd Wichita, Kansas

OLIN MATHIESON CHEMICAL CORP.
Mathleson Bldg.
10 Light Street
Baltimore 3, Maryland

ONE-SPOT COMPANY Box 217 Jessup, Maryland

OPITZ, INC., JOHN 50-14-39th Street Long Island City 4, New York

PAPER PRODUCTS, INC.
P. O. Box 5158
Long Beach 5, California

PARKE, DAVIS AND CO. Foot of Joseph Campau Detroit 32, Michigan

PARRAMORE AND GRIFFIN SEED COM-PANY, INC. 108 S. Toombs Street Valdosta, Georgia

PAXTON ENTERPRISES
Drawer A
Palacios, Texas

PEARSON AND CO. 151 N. Commerce Street Mobile, Alabama

PEELE COMPANY, INC., W. R. 516 S. Salisbury Street Raleigh, North Carolina

PENICK AND CO., S. B. 100 Church Street New York 8, New York

PENNSALT CHEMICALS CORP.
Three Penn Center Plaza
Philadelphia 2, Pa.

PENNSALT CHEMICALS CORP. 2901 Taylor Way Tacoma 2, Washington

PENNSYLVANIA ENGINEERING CO. 1107-21 N. Howard Street Philadelphia 23, Pa.

PENNSYLVANIA REFINING CO.
Commonwealth Bank & Trust Co. Bldg.
Butler, Pennsylvania

PEST-GUARD PRODUCTS, INC. 731 W. Davis Street Dallas 8, Texas PET CHEMICALS, INC. 1038 N.W. 21st Ter. Miami, Florida

PFEIFFER CO., THE 3965 Laclede Avenuc St. Louis 8, Missouri

PFIZER AND COMPANY, INC., CHARLES 11 Bartlett Street Brooklyn 6, New York

PHELPS DODGE REFINING CORPORATION 300 Park Avenue New York 22, New York

PIC CORP. 480 Washington St. Newark 2, New Jersey

PIONEER MANUFACTURING CO., THE 3053 E. 87th Street Cleveland 4, Ohio

PITTSBURGH PLATE GLASS CO. New Albany Road Moorestown, New Jersey

PLANTABBS CORP. LANTABBS CORP. 1105 Maryland Avenue Baltimore 1, Maryland

PLANTERS CHEMICAL CORP. Virginia Beach Blvd. Norfolk 16, Virginia

PLOUGH, INC. 3022 Jackson Avenue Memphis, Tennessee

POLK MILLER PRODUCTS CORP. 2007 North Hamilton Street Richmond 30, Virginia

POPLIN CHEMICAL CO.
Route 1, Box 300
Statesville, North Carolina

PRATT CO., B. G. 204 21st Avenue Paterson, New Jersey

PRATER WHOLESALE CO., E. H. Route #3 Route #3
Seneca, South Carolina

PROCTER AND GAMBLE CO., THE P. O. Box 599 Cincinnati 1, Ohio

PROTECTION PRODUCTS MANUFACTUR-ING CO. 2305 Superior Avenue Kalamazoo, Michigan

PUREX CORPORATION, LTD. 9300 Rayo Avenue South Gate, California PYRROLE CHEMICAL CORP.

817 Spring Lane Portsmouth, Ohio

RALSTON PURINA CO. 835 South Eighth Street St. Louis, Missouri

RAPID CHEMICAL CO. 113-East-J St. Forest City, Iowa

RAT LUNCHES CO. 10 S. Winona Ct. Denver 19, Colorado RAWLEIGH CO., THE W. T. 223-225 E. Main St. Freeport, III.

REARDON LABORATORIES, INC., W. G. 330 North Main Street Port Chester, New York

REEFER-GALLER, INC. 521 Fifth Avenue New York 17, New York

REICHOLD CHEMICALS, INC. Tuscaloosa, Ala.

REXAIR, INC. 700 N. Wheeling St.
Toledo 5, Ohio

REXALL DRUG CO. 8480 Beverly Boulevard Los Angeles 54, California

REX RESEARCH CORP. 600 Montrose Ave. Toledo 7, Ohio

RIGO MANUFACTURING COMPANY, INC. Box 1188, 638 Benton Avenue Nashville, Tennessee

RINGER CORP., JUDD
3355 Republic Avenue
Minneapolis 26, Minn.

RODENT CONTROL FUND, N. C. STATE COLLEGE
P. O. Box 5577, State College Station
Raleigh, North Carolina

ROHM AND HAAS CO.
222 W. Washington Square
Philadelphia 5, Pa.

ROLFES CO., GEORGE A.
Paratrol Division
Paratrol Boone, Iowa

ROYAL CHEMICAL COMPANY, INC. P. O. Box 922 Albemarle, North Carolina

RUST-OLEUM CORP. 2425 Oakton Street Evanston, Illinois

SABINE CHEMICAL CO. P. O. Box 1206 Port Arthur, Texas

SALSBURY LABORATORIES, DR. 500 Gilbert Street Charles City, Iowa

SANFAX CORP. P. O. Box 604 Atlanta, Ga.

SAUER, THE C. F. CO. 2000 West Broad Street Richmond 20, Virginia

SCOTT AND SONS CO., O. M. Marysville

SEACOAST LABORATORIES, INC. 156 Perry Street New York 14, New York

SEARS, ROEBUCK & CO. 925 S. Homan Avenue Chicago 7, Illinois

SELIG CO., THE 342 Marietta St., N.W. Atlanta 13, Georgia

SENORET CHEMICAL CO. 610 Gratiot Street St. Louis 2, Missouri

SEXTON AND CO., JOHN P. O. Box 8281 Philadelphia 5, Pa.

SHELL CHEMICAL CO. 110 W. 51st St. New York 20, New York

SHELL OIL CO.
50 W. 50th Street
New York 20, New York

SHEPARD CHEMICAL WORKS P. O. Box 473 Wilmington, North Carolina

SHERMAN LABORATORIES Agricultural Division 5031 Grandy Avenue Detroit 11, Michigan

SHULTON, INC. 697 Route 46 Clifton, New Jersey

SHUPTRINE CO.
P. O. Box 644
Savannah, Georgia

SINGLETARY, JR. AND CO., F. B. 208 S. Washington Street Rocky Mount, N. C.

SMITH SEED AND FEED CO. 315 Lynn Street Danville, Virginia

SMITH SPECIALTIES CO., T. W. P. O. Box 5146 Charlotte 6, North Carolina

C. PEACH GROWERS ASSOCIATION P. O. Box 928 Spartanburg, South Carolina

SOUTHERN AGRICULTURAL INSECTI-CIDES, INC. P. O. Box 352 Hendersonville, North Carolina

SOUTHERN CHEMICAL CO. P. O. Box 930 Hendersonville, North Carolina

SOUTHERN TESTING AND RESEARCH LABS. 607 Park Avenue Wilson, North Carolina

SPINDLE CITY CHEMICAL CO.
Box 444-526 E. Charlotte Ave.
Sumter, South Carolina

SPIRITTINE CHEMICAL CO. P. O. Box 233 Wilmington, North Carolina

SPRAYWAY, INC. 7644 Vincennes Ave., S. Chicago 20, Ill.

STALFORT PRESSURE-PAK, INC. 2012 Hammonds Ferry Rd. Baltimore 27, Maryland

STANDARD LABORATORIES, INC. 201 Tabor Road Morris Plains, New Jersey

STANDARD PACKAGING CORP. 200 E. 42nd St. New York 17, New York

STANDARD SPRAY AND SUPPLY CO. P. O. Box 63 Lakeland, Florida

STAUFFER CHEMICAL CO. P. O. Box 5388 Tampa 5, Florida

STEARNS' ELECTRIC PASTE CO. 8 So. Dearborn Street Chicago 3, Ill.

STEPHENSON CHEMICAL CO. P. O. Box 188 College Park, Georgia

STERLING COMPANY, INC., THE 2801-05 Locust St. St. Louis 3, Mo.

STERNO, INC. 300 Park Avenue New York 22, New York

STERWIN CHEMICALS, INC. 1450 Broadway New York 18, New York

STRICKLAND AND CO., J.
1400 Ragan St.
Memphis 2, Tennessee

STULL'S CHEMICALS, INC. P. O. Box 6386 San Antonio 9, Texas

SUN OIL CO. 1608 Walnut Street Philadelphia 3, Pa.

1608 Walnut Street
Philadelphia 3, Pa.
SUWANNEE DRUG CO.
128 Central Avenue
Newberry, Florida

SWEENEY MANUFACTURER, INC., W. E. 340 S. Main St. Salisbury, Missouri

SWIFT AND CO.
Agricultural Chemical Div.
P. O. Box 7537
Norfolk 15, Virginia

TAYLOR CHEMICAL CO.
P. O. Box 337
Aberdeen, North Carolina
TENNESSEE CORP

TENNESSEE CORP. 617-29 Grant Building Atlanta 1, Georgia

TERRELL MOTHPROOF INSTITUTE
2 West Columbia Street Springfield, Ohio

TESCO CHEMICALS, INC.
P. O. Box 6286
Atlanta 8, Georgia

TEXAS REFINERY CORP.
P. O. Box 711
Fort Worth, Texas

TEXIZE CHEMICALS, INC. 215 Lawyers Bldg. Greenville, South Carolina

THOMPSON-HAYWARD CHEMICAL CO. P. O. Box 768 Kansas City 41, Missouri

TOXITE LABORATORIES, INC. P. O. Box 29241 Cumberland, Indiana

TRIANGLE CHEMICAL CO. 206 Lower Elm Street Macon, Georgia

UNION CARBIDE CONSUMER PRODUCTS CO. Division of Union Carbide Corp. 270 Park Avenue New York 17, New York

UNION CARBIDE CORP. 270 Park Avenue, 25th Floor New York 17, New York

UNITED CHEMETRICS 600 South 4th St. Richmond, California

U. S. BORAX AND CHEMICAL CORP. 630 Shatto Place Los Angeles 5, California

U. S. RUBBER CO.
Naugatuck Chem. Div.
Elm Street
Naugatuck, Connecticut

VANDERBILT COMPANY, INC., R. T. 230 Park Avenue New York 17, New York

VAPOR PRODUCTS CO. P. O. Box 8294 Orlando, Florida

VAPORETTE, INC. 2416 South Harwood Dallas 5, Texas

VESTAL LABORATORIES, INC. Div. of DuBois Chems., Inc. 4963 Manchester St. Louis 10, Mo.

VIKON CHEMICAL CO. P. O. Box 277 Elon College, North Carolina

VINELAND CHEMICAL SALES CORP. West Wheat Road Vineland, New Jersey

VINELAND LABORATORIES, INC. P. O. Box 70 Vineland, New Jersey

VINELAND POULTRY LABORATORIES P. O. Box 70 Vineland, New Jersey

VINSON CHEMICAL PRODUCTS CO. 4435 N.W. 2nd Avenue Miami 37, Florida

VIRGINIA-CAROLINA CHEMICAL CORP. 401 E. Main Street Richmond, Virginia VIRGINIA CHEMICALS AND SMELTING CO. West Norfolk, Virginia

WALGREEN LABORATORIES, INC. 4300 Peterson Avenue Chicago 46, Illinois

WALTON-MARCH 1592 Deerfield Rd. P. O. Box 248 Highland Park, Ill.

WARD'S PRODUCTS, INC. P. O. Box 739 Arcadia, Florida

WATKINS PRODUCTS, INC. 150 Liberty Street Winona, Minnesota

WECO PRODUCTS CO. 20 N. Wacker Drive Chicago 6, Illinois

WEEVIL-CIDE CO., THE 1323 Union Avenue Kansas City 1, Missouri

WELLS & COMPANY, INC., S. C. 1-3 Church St. LeRoy, New York

WESTCHESTER VETERINARY PRODUCTS Division of Combe Chem., Inc. 180 Mamaroneck Avenue White Plains, New York

WEST CHEMICAL PRODUCTS 42-16 West Street Long Island City 1, New York

WESTON PRODUCTS CO. 330 W. Salisbury Street Asheboro, North Carolina

WHITMIRE RESEARCH LABORATORIES, INC. 339 S. Vandeventer Avenue St. Louis 10, Missouri

WHITMOYER LABORATORIES, INC. 19 N. Railroad Street Myerstown, Pa.

WILSON CHEMICAL DIST. CO. Lodge & Spruce Streets Wilson, North Carolina

WILSON, INC., ANDREW Baltusrol Way Springfield, New Jersey

WINDSOR WAX COMPANY, INC. 611 Newark Street Hoboken, New Jersey

WINN CHEMICAL COMPANY, INC. Route 3, Box 427 Anniston, Alabama

WINTER GARDEN ORNAMENTAL NURS-ERY, INC. P. O. Box 428 Winter Garden, Florida

WIRTHMORE FEEDS, INC. 343 Winter Street Waltham 54, Mass.

WOODLETS, INC. 2048 Niagara Street Buffalo 7, New York WOOD RIDGE CHEMICAL CORP. Park Place East, Box 97 Wood Ridge, New Jersey

WOOD TREATING CHEMICALS CO. 5137 Southwest Avenue St. Louis 10, Missouri

WOOLFOLK CHEMICAL WORKS, LTD. East Main Street Fort Valley, Georgia

WORRELL-CONSOLIDATED LABORATO-RIES, INC. 1470 S. Vandeventer Avenue St. Louis 10, Missouri

WRIGHT COMPANY, INC., M. A. 505 Court Street Brooklyn 31, New York WYANDOTTE CHEMICALS CORP. 1609 Biddle Avenue Wyandotte, Michigan

WYATT-QUARLES SEED CO. 327 S. Wilmington St. Raleigh, North Carolina

WYETH LABORATORIES
Division of American Home Products Corp.
P. O. Box 8299
Philadelphia 1, Pennsylvania

YALE CHEMICAL CO. P. O. Box 715 Nashville, Tennessee

ZUMMACH, INC., WM. F. 120 E. Mineral Street Milwaukee 4, Wisconsin

# N. C. Aerial Crop Dusting Law and Regulations

The North Carolina Aerial Crop-Dusting Law, enacted by the General Assembly of 1953, has passed through its ninth year of enforcement. Its purposes are to protect public health and welfare, to bring improved order in the aerial dusting industry and to eliminate practices which were not in the best interest of the industry or those whom it serves. Marked progress has been made, but there is much yet to be accomplished. The North Carolina Aerial Applicators Association and other members of the industry sponsored the law and cooperate in its enforcement.

The law and the regulations promulgated thereunder, in summary, require the registration and licensing of those who engage in the custom application of pesticides by aircraft in this state. Qualifications for license requires adequate knowledge of the proper use and application of pesticides, the dangers involved and precautions necessary in their application.

Annual renewal of all licenses is required. The validity of any license is further restricted to the period of time that coverage by liability bond or insurance for damage by aircraft is in force. The minimum liability coverage is \$5,000.00 for property damage, \$10,000.00 for personal injury, and \$20,000.00 for any one accident.

Licenses are of two types: Contractors—who contract for the airplane application of pesticides; and Applicators or aviators—those who do the application work. An individual, upon qualification, may procure both licenses. Applicator's licenses, among other things, are contingent on Civil Aeronautics Authority certificates and waiver for low flying.

Licenses may be suspended or revoked if licensees are no longer qualified, for fraudulent, faulty, careless or negligent operations, or for other failure to comply with the requirements of the law. They are automatically nullified upon cancellation or expiration of liability coverage.

The law and regulations are given in the succeeding pages.

# N. C. AERIAL CROP-DUSTING LAW

CHAPTER 106, N. C. GENERAL STATUTES.

#### Article 4B, Aircraft Application of Pesticides

§106-65.13. Definitions. For the purposes of this article:

- (1) The term "aircraft" means any contrivance now known or hereafter invented, used or designed for navigation of, or flight in, the air.
- (2) The term "Board of Agriculture" means the North Carolina Board of Agriculture.
  - (3) The term "Commissioner" means the Commissioner of Agriculture.

- (4) The term "custom application of pesticides" means any application of pesticides by aircraft.
- (5) The term "fungi" means all non-chlorophyll-bearing thallophytes (that is, all non-chlorophyll-bearing plants of a lower order than mosses and liverworts), as, for example, but not limited to, rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in living man or other animals.
- (6) The term "fungicide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating fungi or plant disease.
- (7) The term "herbicide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any weed.
- (8) The term "insect" means any of the numerous small invertebrate animals generally having the body more or less obviously segmented, for the most part belonging to the class Insecta, comprising six-legged, usually winged forms, as, for example but not limited to, beetles, bugs, bees, and flies, and to other allied classes of arthropods whose members are wingless and usually have more than six legs, as, for example, but not limited to, spiders, mites, ticks, centipedes, and wood lice.
- (9) The term "insecticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects which may be present in any environment whatsoever.
- (10) The term "person" means any individual, firm, partnership, association, corporation, company, joint stock association, or body politic, or any organized group of persons whether incorporated or not; and includes any trustee, receiver, assignee, or other representative thereof.
- (11) The term "pesticide" or "economic poison" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, fungi, bacteria, weeds, or other forms of plant or animal life or viruses, except viruses on or in living man or other animals, which the commissioner shall declare to be a pest.
- (12) The term "weed" means any plant or plant part which grows where not wanted.

#### §106-65.14. Licenses.

- a. It shall be unlawful for any person to engage in custom application of pesticides within this State at any time without a license issued by the Commissioner. Application for a license shall be made to the Commissioner and each application shall contain information regarding the applicant's qualifications and proposed operations and such other relevant matters as may be required pursuant to regulations promulgated by the Board of Agriculture.
- b. The Commissioner may require the applicant to show, upon examination, that he possesses adequate knowledge concerning the proper use and application of pesticides, and the dangers involved and precautions to be taken in connection with their application. If the applicant is other than an individual, the applicant shall designate an officer, member, or

technician of the organization to take the examinations, such designee to be subject to the approval of the Commissioner. If the extent of the applicant's operations warrant it, the Commissioner may require more than one officer, member or technician to take the examination.

- c. If the Commissioner finds the applicant qualified, the Commissioner shall issue a license, which shall authorize the licensee to perform custom application of pesticides within this State. The license may restrict the applicant to the use of a certain type or types of materials if the Commissioner finds that the applicant is qualified to use only such type or types. If a license is not issued as applied for, the Commissioner shall inform the applicant in writing of the reasons therefor. All licenses issued under this article shall expire on December 31 of each year and may be renewed upon the filing of a new application therefor.
- d. The Commissioner may suspend, pending inquiry, for not longer than ten days, after opportunity for a hearing, may revoke, or modify the provisions of any license issued under this section, if he finds as a fact that the licensee is no longer qualified or has engaged in fraudulent business practices in the custom application of pesticides, or has made any custom application in a faulty, careless, or negligent manner, or has violated any of the provisions of this article or regulations made thereunder.
- e. The Commissioner may require, under such rules and regulations as may be promulgated under this article, from each applicant a liability bond against damage to person or property by aircraft and a reasonable performance bond with sufficient surety satisfactory to the Commissioner, which performance bond is to secure the performance of contractual obligations of the licensee with respect to custom application of pesticides. Any person injured by the breach of any such obligation or any person damaged by such aircraft shall be entitled to sue on the bond in his own name in any court of competent jurisdiction to recover the damages he may have sustained.
- f. Any person aggrieved by any action of the Commissioner may within ten days after notice thereof request a review of said action by the Board of Agriculture. If no request for review is so made, the decision of the Commissioner shall be final. If a review is so requested, the Board of Agriculture shall promptly review the action of the Commissioner and either affirm or over-rule his action. If the Board of Agriculture affirms the Commissioner, it shall find the facts of the case and the aggrieved person may within thirty days after notice thereof appeal to the Superior Court of the county in which such person resides or to the Superior Court of Wake County and the matter may be heard in or out of chambers. Notice of the appeal shall be served on the Commissioner and within ten days thereafter the Commissioner shall certify and file in the court to which the appeal is taken a transcript of any record pertaining thereto, including a transcript of evidence received. The court shall have jurisdiction to affirm, set aside or modify the action of the Board of Agriculture, provided, that the findings of fact as made by said Board, if supported by evidence, shall be conclusive.

Any license which has been suspended or revoked by the Commissioner or Board of Agriculture shall remain suspended or revoked until the laws, and regulations of the Board of Argiculture, have been complied with or until the decision or action of said Commissioner or Board has been set aside by court action.

§106-65.15. Regulations, materials and methods of application.—The Board of Agriculture, after public hearing, may adopt regulations prohibiting the use of materials or methods in custom application of pesticides to the extent necessary to protect health or property and may make such other regulations as it may deem necessary to carry out the provisions of this article. *Provided, however*, such regulations shall not be inconsistent with regulations issued by this State or by the Federal Government respecting safety in air navigation or operation of aircraft and before issuing any regulations directly related to any matter within the jurisdiction of any other official of this State, the Commissioner shall consult with that official with reference thereto.

§106-65.16. Reports.—The Board of Agriculture may by regulation require any licensee to maintain records and furnish reports giving information with respect to particular applications of pesticides and such other relevant information as the Board of Agriculture may deem necessary.

§106-65.17. Information.—The Commissioner may, in cooperation with the North Carolina Agricultural Experiment Station, publish information regarding injury which may result from improper application or handling of pesticides and the methods and precautions designed to prevent such injury.

§106-65.18. Penalties.—Any person violating the provisions of this article or the regulations issued hereunder shall be guilty of a misdemeanor and upon conviction shall be fined or imprisoned or both in the discretion of the court.

§106-65.19. Enforcement.—For the purpose of carrying out the provisions of this article the Commissioner may enter upon any public or private premises at reasonable times in order to have access for the purpose of inspecting any aircraft or materials subject to this article.

§106-65.20. Delegation of Duties.—The functions vested in the Commissioner by this article may be delegated by him to such employees of the Department of Agriculture or other qualified persons as the Commissioner may from time to time designate for such purposes.

§106-65.21. Cooperation.—The Commissioner may cooperate with any other agency of this State or its sub-divisions or with any agency of any other State or of the Federal Government for the purpose of carrying out the provisions of this article and of securing uniformity of regulations.

# RULES, REGULATIONS, DEFINITIONS AND STANDARDS CHAPTER XII

# **Application of Pesticides By Aircraft**

#### ARTICLE 1. APPLICATION OF PESTICIDES BY AIRCRAFT

- §12-1. Application for license.—Application for a license to engage in the custom application of pesticides by aircraft shall be made to the Commissioner of Agriculture upon forms prescribed for that purpose and furnished by the Department of Agriculture.
- §12-2. Classes of licenses.—There shall be two classes of licenses which shall authorize the holders thereof to engage in the custom application of pesticides to the extent authorized by the license and the rules and regulations of the State Board of Agriculture. The classes of licenses shall be as follows:
- (a) Contractor's License. A contractor's license shall authorize the holder thereof to contract for the aerial application of pesticides.
- (b) Airplane Applicator's License. An airplane applicator's license shall entitle the holder thereof to apply pesticides as contracted for by the holder of an operator's license.
- §12-3. Examination for license.—Before any license is issued, the Commissioner may require the applicant to undergo such examination and to submit such other information as the Commissioner in his discretion may deem necessary for a proper determination of the applicant's qualifications.
- §12-4. Modification, revocation or suspension of license.—All licenses are subject to modification as to terms and privileges and may be revoked or suspended by the Commissioner of Agriculture according to the provisions of G.S. 106-65.14. Licenses may be issued for periods of less than one year but all licenses shall expire on December 31 of each year and may be renewed upon the filing of a new application therefor.
- §12-5. Display of license.—All holders of contractor's or airplane applicator's licenses shall keep their licenses conspicuously posted at their place of business or about their person when engaged in the application of pesticides by aircraft and shall show their license upon request. Upon satisfactory proof of the loss or destruction of a license, a duplicate thereof may be issued to the qualified holder.
- §12-6. Liability bond.—No airplane applicator's license shall be issued unless the applicant submits to the Commissioner of Agriculture along with the application for license a liability insurance policy covering said applicant and the person or persons for whom the custom application of pesticides is to be made against liability for damage to all persons or property caused by said aircraft. Said liability insurance policy shall cover at least \$5,000.00 for property damage, \$10,000.00 for personal injury, and \$20,000.00 for any one accident; and shall be required to be in force for the

duration of the applicant's license: Provided, however, it is not the intent of this regulation for any liability insurance policy to cover damages resulting from the application of pesticides, but only for damages caused by aircraft.

- §12-7. Report and records.—Each contractor shall maintain daily reports and records on forms satisfactory to the Commissioner and all such reports and records shall be kept open and available for inspection by any authorized representative of the Department of Agriculture. Each contractor shall also submit to the Commissioner of Agriculture on or before December 31 of each year an annual report on forms furnished by the Commissioner, covering in detail the contractor's activities for the period covered by the report.
- §12-8. Responsibility of contractors and applicators.—All contractors and applicators shall be responsible for the proper use and maintenance of equipment and for the proper use and application of pesticides; and shall at all times use due care for the protection of surrounding property, crops, fish ponds, plants and livestock. Any contractor or applicator who violates or disregards the provisions of this regulation or who makes any custom application in faulty, careless, or negligent manner shall have his license suspended or revoked according to the provisions of G.S. 106-65.14.

(Adopted: June 22, 1953)

(Authority: G. S. 106-65.15)

# Licensees Under N. C. Aerial Crop-Dusting Law for 1962

This list gives the names of firms or individuals who registered with the North Carolina Department of Agriculture and were issued licenses as Contractors, Applicators, or both, for the year 1962. Each type of license is indicated in connection with the respective name of individual or firm as given in the list.

All licenses expire December 31, 1962, or earlier according to expiration of insurance coverage and are subject to renewal for operations in 1963.

ALAMANCE AVIATION SERVICE, INC. Box 1331 Burlington, North Carolina Contractor

MARVIN ANGE Route 1, Box 112 Plymouth, North Carolina Contractor

JACK ARMSTRONG
P. O. Box 1231
New Bern, North Carolina
Applicator

ASPLUNDH TREE EXPERT COMPANY 2804 Rothgeb Drive Raleigh, North Carolina 505 York Road Jenkintown, Pennsylvania Contractor

W. H. BAGGETT
Baggett Dusting Service
c/o General Delivery
Scotland Neck, North Carolina
603 South 22nd Street
Ft. Pierce, Florida
Applicator and Contractor

MILTON R. BARNES P. O. Box 334 Greensboro, North Carolina Applicator

LLOYD H. BARNWELL Kittrell Livestock Corapeake, North Carolina c/o M. E. Rogers Warehouse Carolina Hdwy Suffolk, Virginia 826 North Daughtry Street Douglas, Georgia Applicator and Contractor

DUKE C. BLEDSOE, JR.
Laurel Springs, North Carolina
Applicator

MAURICE N. BRADFORD P. O. Box 1231 New Bern, North Carolina Applicator

FRAZIER MACK BRAME c/o Leland S. McMahon Route 2 Reidsville, North Carolina Applicator

ROBERT S. BRYAN 605 S. Pembroke Avenue Ahoskie, North Carolina Applicator PERRY P. BRYANT P. O. Box 101 Washington, North Carolina Applicator

JOSEPH HENRY BYNUM, JR. P. O. Box 301 Washington, North Carolina Applicator

GEORGE A. CAMPBELL Route 1 Pfafftown, North Carolina Applicator

OSCAR B. CASE
Case Dusting Service
55 Mt. Airy Street
Hendersonville, North Carolina
Applicator and Contractor

H. H. CHRISTOPHER
Christopher Dusting Service, Inc.
Box 446
Raeford, North Carolina
Box 716
Okeechobee, Florida
Applicator and Contractor

CLINTON FLYING SERVICE P. O. Box 63 Clinton, North Carolina Contractor

COASTAL AERO
P. O. Box 741
Washington, North Carolina
Contractor

BENJAMIN F. COLLINS 2804 Rothgeb Drive Raleigh, North Carolina 885 Easton Road Glenside, Pennsylvania Applicator

WILLIAM T. CONNELL, JR. c/o Riddle & Poindexter Crop Spraying, Inc. Route 2 Dobson, North Carolina Avon Park, Florida Applicator

JOE COUCH
P. O. Box 231
Washington, North Carolina
Applicator

JOSEPH H. COX, JR.
Morehead-Beaufort Airport, North Carolina
105 North 40th Street
Ft. Pierce, Florida
Applicator

CRAFT SPRAYING INC. 120 East Wilson Street Farmville, North Carolina Contractor

WILLIAM JOSEPH CREWS Route 2 King, North Carolina Applicator

J. L. DARR, JR. Archdale, North Carolina Applicator

JAMES L. DeHAVEN Route 1, Box 123 Ahoskie, North Carolina Applicator

CHARLES G. DICKENS Roanoke, Virginia Applicator

CORYDON MEAD EASTWOOD, JR. 202 Westchester Drive P. O Box T Lafayette, Louisiana Applicator

WESLEY F. EDWARDS Seaboard, North Carolina 3327½ Avenue J. N. W. Winter Haven, Florida Applicator and Contractor

IRA CRAIG ELROD
Helicopter Industries Corporation
2626 Sharon Road
Charlotte, North Carolina
Applicator and Contractor

GLEN C. ERWIN P. O. Box 231 Washington, North Carolina Graff, Missouri Applicator

LLOYD A. ESH
P. O. Box 63
Clinton, North Carolina
Route 1
Paradise, Pennsylvania
Applicator

MACK G. EURE General Delivery Seaboard, North Carolina 1701 Weber Avenue Orlando, Florida Applicator and Contractor

GEORGE A. EWELL P. O. Box 101 Washington, North Carolina Applicator

EDGAR MALONE EWING
Kittrell Livestock
Corapeake, North Carolina Tifton, Georgia Applicator

DOVER FOGLEMAN Box 1331 Burlington, North Carolina Applicator

SIDNEY E. GIBBS 2535 Broad Street, N. W. Roanoke, Virginia Applicator Applicator

GREENVILLE AVIATION, INC.
P. O. Box 231
Washington, North Carolina Contractor

WALTER RAY GRIFFIN
Ray Griffin Flying Service
Route 1

Route 1
Summerfield, North Carolina
Applicator and Contractor

WILLIAM E. GUNN
P. O. Box T
Lafayette, Louisiana
123 Brockton Drive
Carancro, Louisiana
Applicator

SHERMAN W. HANKE IERMAN W. HANKE
Box 29
Summerfield, Florida

WAYNE J. HENNINGES P. O. Box 1231 New Bern, North Carolina Applicator

WALTER E. HIGHT, JR.
c/o Turner's Flying Service
Henderson, North Carolina
Applicator Applicator

GEORGE VON HOLDT c/o King Flying Service King, North Carolina
Fertile, Minnesota Applicator

HOLLEY DUSTING SERVICE, INC.
Meyer Flying Service
Hendersonville, North Carolina
P. O. Box 945
Homestead, Florida Contractor

ROBERT A. HOLMAN
Route 2
King, North Carolina

JERNIGAN SPRAY SERVICE, INC. P. O. Box 488
Ahoskie, North Carolina
Contractor

PERRY W. JONES
325 Spring Street
Hendersonville, North Carolina Applicator

JOSH JORDAN OSH JORDAN Candor, North Carolina Applicator and Contractor

ROBERT M. KEENAN DBERT M. REPORTS
BOX 1331
Burlington, North Carolina
411 West 5th Street
Greenville, North Carolina
Applicator

ROBERT ARNOLD KELLER Route 3, Box 22B Clinton, North Carolina Waterviliet, Michigan Applicator

NG FLYING SERVICE
Route 2
King, North Carolina KING FLYING SERVICE Contractor

CLAIR KLINGER
c/o Dillard Powell
Ruffin, North Carolina
Box 214
Groveland, Florida
Applicator

JOHN D. KROM c/o Marshall Denny Route 2 King, North Carolina Applicator

ROBERT C. LANGSTON Greenville, North Carolina Arlington 6, Virginia Applicator

CLARENCE ROBERT LAY
P. O. Box 741
Washington, North Carolina
Applicator

DWIGHT LOHR
Dellwood Drive
Archdale, North Carolina
Applicator and Contractor

JACK LOWERS
Route 3, Box 22B
Clinton, North Carolina
Applicator and Contractor

JIMMY FLETCHER MARKHAM P. O. Box 842 Washington, North Carolina Elizabeth City, North Carolina Applicator

ERNEST H. MARSHALL 55 Mt. Airy Street Hendersonville, North Carolina Homestead, Florida Applicator

F. F. MARTENS
Route 5, Box 332B
Hendersonville, North Carolina
Perrine, Florida
Applicator

S. S. MILLER Chatham, Virginia Applicator

CLARENCE T. MODLIN 205 Wilson Street Laurinburg, North Carolina Applicator

WALTER C. MYERS 635 Oak Grove Drive Graham, North Carolina Applicator and Contractor

DARWIN McCLURE
P. O. Box 231
Washington, North Carolina
Colchester, Illinois
Applicator

LELAND S. McMAHON
Route 2
Reidsville, North Carolina
Applicator and Contractor

R. A. NAYLOR
P. O. Box 63
Clinton, North Carolina
Applicator

HARRY W. NELSON
Route 1
Dover, North Carolina
P. O. Box 883
Ft. Pierce, Florida
Applicator and Contractor

MARSHALL J. NEWMAN 606 Kirby Street Raleigh, North Carolina Route I Clinton, North Carolina Applicator

NEIL F. OLESON
Wilson Airport
Wilson, North Carolina
Applicator and Contractor

I)ELMAR C. OWENS
P. O. Box 183
Columbia, North Carolina
Applicator and Contractor

PAMLICO FLYING SERVICE P. 0. Box 1231 New Bern, North Carolina Contractor

GROVER T. PARKS
Climax, North Carolina
Applicator

PETROLEUM HELICOPTERS, INC. P. O. Box T Lafayette, Louisiana Contractor

DILLARD M. POWELL Ruffin, North Carolina Contractor

F. M. POWELL 1705 Powatan Street Fayetteville, North Carolina Applicator and Contractor

JAMES C. PRICE
Route 1
Airport Road
Dilion, South Carolina
Applicator and Contractor

JOHN C. PULLEY
c/o Turner's Flying Service
Henderson, North Carolina
810 Stanton Avenue
Waycross, Georgia
Applicator

CLAUDE MITCHELL RIDDLE Dobson, North Carolina Applicator

RIDDLE & POINDEXTER CROP SPRAYING, INC.
Route 2
Dobson, North Carolina
Contractor

ROCKY MOUNT AERIAL APPLICATORS 430 Craig Street Rocky Mount, North Carolina Contractor

M. M. RODDY
430 Craig Street
Rocky Mount, North Carolina
Applicator

- SCOTLAND FLYING SERVICE, INC. 205 Wilson Street Laurinburg, North Carolina Contractor
- NATHAN M. SIMPSON Simpson Crop Service, Inc. Route 2 Elon College, North Carolina Applicator and Contractor
- SOUTHEASTERN AERIAL CROP SERVICE, INC. Morchead-Beaufort Airport, North Carolina Box 982 Ft. Pierce, Florida Contractor
- SOUTH EASTERN AIR SERVICE, INC. P. O. Box 334 Greensboro, North Carolina Contractor
- THOMAS E. STANCIL, JR. Stancil Flying Service P. O. Box 101 Washington, North Carolina Applicator and Contractor
- CARL A. SWERTFEGER 5208 Windermere Avenue Norfolk, Virginia Applicator
- GENE A. SWOFFORD Route 2 Belhaven, North Carolina Applicator
- AYLOR T. TALBOTT
  Aylors Crop Spraying Service
  Halifax Road
  South Boston, Virginia
  Applicator and Contractor
- B. W. TRUEBLOOD Southern Blvd. Rocky Mount, North Carolina Applicator
- ROBERT J. TURNER, JR. Turner's Flying Service 543 Rowland Street Henderson, North Carolina Applicator and Contractor

- FREDERICK J. VAUDRIN
  Vaudrin Air Spray
  e/o Spot Mabe
  Danbury, North Carolina
  1101 South 7th Street
  Minneapolis, Minnesota
  Applicator and Contractor
- ALBERT R. VAUGHAN
  Al's Crop Spraynig Service
  Route 3
  Virgilina, Virginia
  Applicator and Contractor
- GEORGE D. WALTERS
  P. O. Box 84
  Elizabeth City, North Carolina
  Applicator and Contractor
- H. C. WARF
  Warf's Flying Service
  Route 6
  Reidsville, North Carolina
  Applicator and Contractor
- A. J. WARREN
  Route 3
  Clinton, North Carolina
  Applicator
- FRED L. WHITFIELD Fred's Spray Service Route 7 Burlington, North Carolina Applicator and Contractor
- ROBERT O. WHITFIELD Whitfield Airplane Spraying Hurdle Mills, North Carolina Applicator and Contractor
- JOHN H. WHITTINGTON 1920 Eastway Drive Charlotte, North Carolina Applicator
- J. B. WILLIAMS, JR. 1320 Horne Street Rocky Mount, North Carolina Applicator
- ROY W. WOOD

  c/o 205 Wilson Street

  Laurinburg, North Carolina

  Raeford, North Carolina

  Applicator
- YADKIN VALLEY, INC. Route 1 Pfafftown, North Carolina Contractor

# Chemical and Common Names of Economic Poisons

#### ALDRIN:

Hexachlorohexahydro-endo, exo-dimethanonaphthalene

#### ALLETHRIN:

dl-2-allyl-4-hydroxy-3-methyl-2-cyclopenten-1-one ester of dl-cistrans-chrys-anthemum monocarboxylic acid

#### ARAMITE:

2(p-tert-butylphenoxy) isopropyl-2-chloroethyl sulfite; Beta-chloroethyl Beta-(p-tertiary-butylphenoxy)-a-methyl ethyl sulfite

# ARSENIC TRIOXIDE:

Arsenious oxide

# BAYTEX; BAYER 29493:

O, O-Dimethyl O-(4-methylthio-m-tolyl) phosphorothioate

#### BHC:

Benzene hexachloride; 1,2,3,4,5,6-Hexachlorocyclohexane

#### BORAX:

Sodium tetraborate decahydrate

#### BORIC ACID:

Boric acid; orthoboric acid

# CALCIUM ARSENATE:

Tricalcium arsenate

#### CALCIUM CYANIDE:

Calcium cyanide

# CAPRYL:

See Karathane

# CAPTAN:

N-trichloromethylmercapto-4-cyclohexene-1,2-dicarboximide; N-trichloromethylthio tetrahydrophthalimide

#### CHLORANIL: SPERGON:

2,3,5,6-Tetrachloro-1,4-benzoquinone

#### CHLORDANE:

1,2,4,5,6,7,8,8 Octachloro-4,7-methano-3a,4,7,7a-tetrahydroindane

#### CHLOROTHION:

O,O-Dimethyl O-(3-chloro-4-nitrophenyl) phosphorothioate

#### COPPER ARSENATE (BASIC):

Cupric arsenate (Basic)

#### 2,4-D:

2,4-Dichlorophenoxyacetic acid

#### DDD:

Dichloro diphenyl dichloroethane; 2,2 bis-(p-chlorophenyl)-1,1-dichloroethane

#### DDT:

Dichloro diphenyl trichloroethane; trichloro bis-(4-chlorophenyl) ethane

#### DDVP:

O,O-Dimethyl-2,2-dichloro vinyl phosphate

#### DEMETON:

Beta-ethylmercapto-ethyl diethyl thionophosphate

#### DIAZINON:

O,O-diethyl O-(2-isopropyl-4 methyl-6-pyrimidinyl) phosphorothioate

#### DICHLONE: PHYGON:

2,3-Dichloro-1,4-naphthoquinone

#### DIELDRIN:

Hexach loro epoxyocta hydro-endo, exo-dimethan on a phthalene

#### DIMITE:

1,1-Bis (p-chlorophenyl)-ethanol

#### DINITRO ORTHO CRESOL:

4,6-Dinitro-o-cresol; 2-methyl-4,6-dinitro-phenol

#### DIPTEREX:

O,O-Dimethyl-1-hydroxy-2,2,2-trichloroethyl phosphonate; Dimethyl-trichloro-hydroxyethylphosphate

## DISODIUM METHYL ARSONATE:

Disodium methane arsonate hexahydrate

#### ENDRIN:

Hexachloroepoxyoctahydro-endo, endo-dimethanonaphthalene

#### FERBAM:

Ferric dimethyldithiocarbamate

#### FUMARIN:

3-(1-Furyl-2-acetyl-ethyl) 4-hydroxycoumarin

#### GLYODIN:

2-Heptadecyl-2-imidazoline

#### **GUTHION:**

O,O-Dimethyl S-(4-oxo-1,2,3-benzotriazinyl-3-methyl) phosphorodithioate

#### **HEPTACHLOR:**

1,4,5,6,7,8,8a-Heptachloro-3a,4,7,7a-tetrahydro-4,7-endo-methanoindane

#### HEXACHLOROPHENE:

2,2'-Methylene-bis(3,4,6-trichlorophenol)

#### KARATHANE: CAPRYL:

4,6-Dinitro-2-caprylphenyl crotonate; 2-(1-methyl)-4,6-dinitrophenyl crotonate

#### KELTHANE:

1,1-bis (p-chlorophenyl)-2,2,2-trichloroethanol; Bis (p-chlorophenyl) trichloroethanol

#### KEPONE:

Decachlorooctahydro-1,3,4-methano-2H-cyclobuta (cd) pentalen-2-one

#### KORLAN: RONNEL:

Dimethyl trichlorophenyl thiophosphate; O,o-Dimethyl O-2,4,5-trichlorophenyl phosphorothioate

#### LETHANE A-70:

Beta Beta dithiocyano diethyl ether

#### LETHANE 60:

Beta-thiocyanoethyl esters of C<sub>10</sub>-C<sub>18</sub> aliphatic fatty acids

#### LETHANE 384:

Beta-Butoxy-Beta-thiocyano-diethyl ether

#### MALATHION:

O,O-Dimethyl dithiophosphate of diethyl mercaptosuccinate; S-(1,2-dicarbethoxethyl) O,O-dimethyl dithiophosphate

#### MANEB:

Manganese ethylenebisdithiocarbamate

#### METALDEHYDE:

Metaldehyde; metacetaldehyde

#### METHOXYCHLOR:

2.2-bis (p-methoxyphenyl)-1,1,1-trichloroethane

#### METHYL PARATHION:

O,O-Dimethyl-o-p-nitrophenyl thiophosphate

#### METHYL TRITHION:

O,O-Dimethyl S-(p-chlorophenylthio) methyl phosphorodithioate

#### MONURON:

3-(p-chlorophenyl)-1,1-dimethylurea

#### MYLONE

3,5-Dimethyltetrahydro-1,3,5,2H-thiadiazine-2-thione

#### **NEBURON:**

1-n-Butyl-3-(3,4-dichlorophenyl)-1-methylurea

#### **NEMAGON:**

1,2-Dibromo-3-chloropropane

#### NICOTINE:

1, Methyl-2-(3-pyridyl) pyrrolidine

#### OVEX:

p-Chlorophenyl p-chlorobenzenesulfonate

#### PARADICHLOROBENZENE:

1,4-Dichlorobenzene

#### PARATHION:

O,O-Diethyl-o-paranitrophenyl thiophosphate

#### PARIS GREEN:

Copper acetoarsenite

#### PERTHANE:

1,1-Dichloro-2,2-bis-(p-ethylphenyl) ethane

#### PHALTAN:

N-(trichloromethylthio) phthalimide

#### PHENOL:

Carbolic Acid

#### PHOSDRIN:

Alpha isomer of 2-carbomethoxy-1-methylvinyl dimethyl phosphate

#### PIPERONYL BUTOXIDE:

Butylcarbityl-6-(propyl piperonyl) ether

#### PIPERONYL CLCLONENE:

3, Isoamyl-5-(methylenedioxyphenyl)-2-cyclo-hexenone

#### PIVAL:

2-Pivalyl-1,3-indandione

#### PIVALYN:

Sodium salt of 2-Pivalyl-1,3-indandione

#### POTASSIUM CYANATE:

Potassium cyanate

#### PYRETHRUM:

Chrysantheum cineroreaefolium

#### ROTENONE:

Rotenone

## SABADILLA:

Schoenocaulon officinale

## SEVIN:

1-Naphthyl-N-methyl-carbamate

#### SILVEX:

2-(2,4,5-Trichlorophenoxy) propionic acid

#### SODIUM ARSENATE:

Sodium meta-arsenate

# SODIUM ARSENITE:

Sodium meta-arsenite

#### SODIUM FLUORIDE:

Sodium fluoride

#### SODIUM FLUOSILICATE:

Sodium fluosilicate; sodium silicofluoride

#### STRYCHNINE:

Strychnine

#### STROBANE:

Mixture of heptachlorocamphene, heptachloropinene and other chlorinated terpenes

#### SULFUR:

Sulfur

#### 2.4.5-T:

2,4,5-Trichlorophenoxyacetic acid

#### TEDION:

2,4,5,4'-Tetrachlorodiphenyl sulphone

#### TERRACHLOR:

Pentachloronitrobenzene

#### THALLIUM SULFATE:

Thallous sulfate

#### THANITE:

Isobornyl thiocyanate

#### THIODAN:

6,7,8,9,10,10-Hexachloro-1,5,5a,6,9,9a-hexa-hydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide

#### THIRAM:

Tetramethylthiurom disulfide

#### TOXAPHENE:

Octachlorocamphene

#### TRITHION:

O,O-Diethyl S-p-chlorophenylthiomethyl phosphorodithioate

#### VAPAM:

Sodium N-methyl dithiocarbamate dihydrate

# VAPONA:

2,2 Dichlorovinyl dimethyl phosphate

#### WARFARIN:

3-(a-Acetonylbenzyl)-4-hydroxycoumarin

#### ZINEB:

Zinc etheylenebisdithiocarbamate

#### ZIRAM:

Zinc dimethyldithiocarbamate

Official Analyses

of

Economic Poisons

1962

## Summary of Economic Poisons Examined — 1962

enial.	SAMPLES				
TYPES	Passed	De- ficient	Excessive Active Ingredient	Mis- branded	Not Regis tere
Arsenicals					
rsenic Trioxide	14	7	1		
opper Acetoarsenite	1				•
ead Arsenate	7		1		
odium Arsenate	i	ï		1	
ricalcium Arsenate	1				
Organic Chlorine Compounds					
ldrin preparations	19	2			2
HC preparations	43 37	6 3	3	1	
aptan preparations	5	3			
hlordane preparations	48	4			1
4-D preparations	4	1			
DD preparations	54 72	6			1 3
DT with other compounds	124	11	1		4
ibrom	3				
ieldrin preparations	9		2		
ipterex	48				
ndrin preparationseptachlor	19	1	****		
epone	ı				
ethoxychlor preparations	31	1			
emagon	2	2		1	•
entachlorophenols	1 8				••••
erthaneonnel	2	3.3	••••		
llvex	ī				
hiodan	1				
oxaphene preparations	113	5			••••
rithion			1	••••	••••
Metallic Compounds	1	1			
DVP	4	1	1		
iazinon	1				
uthion	1			<	
alathion	56 17	19	1	1	2
[etallic Dithiocarbamate preparations[ethyl Parathion	2	7			
hosdrin	4				
hosphorus	3				
hallium Sulfate	14				
Botanicals	9				ï
rethrin preparations	$\frac{2}{35}$	ï		1	
otenone preparations	57	10			
abadilla	9				
Miscellaneous					
aytex	1				
orax	1			••••	
alcium Cyanideinitro Ortho Cresol	2				
luorine compounds	6	3			1
umarin	5				
ethane compounds	1	1			
-Alkyl (98% C <sub>12</sub> , 2% C <sub>14</sub> ) Dimethyl (1-methyl	1				
naphthye) ammonium chloride monohydrate		1			
aphthalene	4				
arathion-Sulfur preparations	1				
henols	1 4				
ival compoundsevin preparations	44	3	2		
ulfur				2	
Varfarin	16				
TOTALS	967	97	13	7	15
Number manufacturers registered (to					
Number manufacturers registered fro	m Nortl	h Carol	na		
Number of items registered					4,0
Number stop sale orders issued					

## **Decisions**

The results of analyses of economic poisons are tabulated in the following pages. For the reader's ready interpretation of the analyses, designations used are explained in the following paragraphs.

"Passed" signifies that the labeling and composition of the product satisfactorily complied with guarantees and requirements. Small deviations in analyses are normal.

"Deficient" usually signifies that one or more ingredient fell significantly below guarantee, although it may also indicate an excess of a harmful ingredient, as in case of water-soluble arsenic. Such products, in most instances, qualify as unsatisfactory and are subject to "Stop Sale Order" and removal from the market for reprocessing or relabeling. In borderline cases, where exact values are indeterminate, the product is qualified as deficient but the manufacturer cautioned. In some instances where such goods have been used before analysis could be completed, the manufacturer has made settlement satisfactory to the user.

"Adulterated" indicates that significant quantities of undeclared active ingredients were present. Since proof of adulteration disqualifies a product, analysis may be discontinued at that point thus saving further expenditure of time and work. Such lots, batches or brands are stopped from sale and other appropriate action taken.

"Misbranded" signifies that labeling failed to conform to requirements. Omission of some item or statement is a more common flaw. Among these may be proper ingredient listing, skull and crossbones, "Poison" in red and an antidote where these are required; net contents by weight or volume; class of, and unsulfonated residues of petroleum oils; and percentages of alkaloids instead of crude product such as sabadilla seed.

In some instances of misbranding the defect appeared to be inadvertent or of a minor nature. It appeared permissible and fair to allow the manufacturer time for correction. In others, removal from sale was necessary.

"Not Registered" signifies that the product was not registered at the time it was sampled. Prompt registration is required or the product is removed from sale.

As has been the practice in past work, analyses were made largely for those ingredients which were considered of major importance, as, for example, gamma isomer of benzene hexachloride, whereas other isomers were not checked. For sake of brevity, items not generally checked are not listed in the tabulations. This should not be taken to indicate that manufacturers did not include them on labels. This procedure has been followed because it enables a broader coverage of all products offered for sale.

## Official Analyses of Economic Poisons, 1962

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions*
ALDRIN	e of weegen	of analyse	The results
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)		
Ortho Aldrin 2 Emulsive Aldrin	23.79	23.62	Passed
Carter Insecticide and Chemical Company, I	nc.		
Carolina Brand Aldrin Emulsion Four Pound	A It Manuellia		
Aldrin do	44.00 44.00	46.47 46.56	Passed Passed
Farmers Cooperative Exchange, Inc.			
FCX Aldrin Emulsifiable Concentrate Aldrin do do	23.32 23.32 23.32	22.27 25.27 21.13	Passed Passed Deficient
Maxwell Insecticide Company, Inc.			
Maxwell 5% Aldrin Granular Aldrin	5.00	5.00	Passed
Olin Mathieson Chemical Corp.			
Mathieson Aldrin 5% Granules Aldrin	5.00	5.71	Passed
Aldrin 5% (Granules) Aldrin	5.00	4.49	Deficient
Mathieson Aldrin 4 lb. Emulsifiable Aldrin	42.74	40.96	Passed
W. R. Peele Company, Inc.			
Pelco 5% Aldrin Granulated			
Aldrin do	5.00 5.00	5.50 4.82	Passed Passed
Pelco 2 lbs. Aldrin Emulsifiable Concentrate Aldrin	24.50 24.50 24.50	24.34 23.21 24.19	Passed Passed Passed
Planters Chemical Corp.			
Planters 5% Aldrin Granular Aldrin	5.00	5.93	Passed

<sup>\*</sup>See preceding page for explanation of "Decisions."

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 5% Aldrin Granules			
Aldrindo	5.00 5.00	5.61 5.21	Passed Passed
SA-50 Brand 25% Aldrin Granules Aldrin	25.00	27.85	Passed
ALDRIN-CAPTAN			
California Chemical Company-Ortho Div.			
Ortho Bird Repellent and Seed Protectant			
Aldrin Captan Theoretical chlorine	20.00 12.50 16.06	16.50	Passed
Aldrin	20.00 12.50	oillaism	Passed
Theoretical chlorine	16.06	16.50	
ARSENICALS ARSENIC TRIOXIDE			
M. A. Chapman and Son			
Kill-Em Rat Poison			
Arsenic trioxide do do do do do do	2.00 2.00 2.00 2.00 2.00 2.00	1.90 1.96 2.19 2.25 2.07 2.02	Passed Passed Passed Passed Passed Passed
do do do do	2.00 2.00 2.00 2.00	2.19 1.81 1.74 1.68	Passed Deficient Deficient Deficient
Kill-Em Rat Poison	2.00	7.00	Deficient
Arsenic trioxide do	2.20 2.20	1.65 2.08	Deficient Deficient
S. L. Cowley and Sons Manufacturing Co.			
Cowley's Rat and Mouse Poison Arsenic trioxide do	1.75 1.75	2.11 2.21	Passed Passed
F. B. Singletary Jr. and Co.			
Singletary's Single Treatment Pest Control			
Arsenic trioxide	3.50	5.51	Excessive Active
do do do	3.50 3.50 3.50	2.79 3.63 3.57	Ingredient Deficient Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Chemical Co.			
Nok-Out-Bam			
Arsenic trioxide	3.00	2.71 3.79 3.30 3.79	Deficient Passed Passed Passed
COPPER ACETOARSENITE			
Acme Quality Paints, Inc.			
Acme Paris Green			
Copper acetoarsenite Arsenic as metallic Water soluble arsenic (not more		40.92	Passed
than)		0.70 24.32	
DISODIUM METHYL ARSONATE			
O. M. Scott and Sons Co.			
Scotts Clout			
Disodium methyl arsonate hexahydrate Arsenic water soluble (not more	2.50	4.70	Excessive Active
than)	0.64	0.18	Ingredient
LEAD ARSENATE			
Acme Quality Paints, Inc.			
Acme Arsenate of Lead			
Arsenate of lead Total arsenic as metallic Arsenic water soluble (not more	98.00 21.15	21.62	Passed
than)	0.50 58.00	0.45 59.59	
Woolfolk Chemical Works, Ltd.			
Security Brand Lead Arsenate			
Lead arsenate	97.00 20.90	21.18	Passed
than)	0.33 57.80	0.12 58.85	
Lead arsenate	97.00 20.90	24.76	Passed
than)	0.33 57.80	0.22 58.47	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
LEAD ARSENATE-CAPTAN-DDT			
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchar	nge, Inc.)		
Unico Fruit Spray Powder			
Lead arsenate Total arsenic as metallic Arsenic water soluble (not more	25.00 5.39	24.56 5.67	Passed
than)	0.50 10.00	0.15	
DDT Theoretical chlorine	10.00 8.54	8.33	
LEAD ARSENATE-COPPER-SULFUR-ZING	c		
98.0 94.0	arom ton)		
Taylor Chemical Co.			
Superkill Pan Apple Spray	1.00		The same
Lead arsenate	16.00 3.00	4.52	Passed
than)	0.30 3.20	0.05 3.18	
Sulfur	38.00	40.56	
Zinc as metallic	4.60	4.61	
LEAD ARSENATE-SULFUR-ZINC			
Woolfolk Chemical Works, Ltd.			
Security Brand Pan Peach Spray			
Lead arsenate	11.50	0.24	Passed
Arsenic as metallic	2.40	2.34	
than)	0.20 34.00	0.05	
Sulfur	9.60	32.44 12.32	
Lead arsenate	11.50		Passed
Arsenic as metallic Arsenic water soluble (not more	2.40	2.34	al comment
than)	0.20	0.10	
Sulfur	34.00 9.60	33.58 9.55	
Zine da metame	7.00	7.55	
SODIUM ARSENATE			1 10
Atla Chemical Company, Inc.			
Atla Anti-Ant			
Sodium arsenate	1.88		Passed
Arsenic as metallic	0.75	0.89	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mahaffey Co.			
Mahaffey's Ant Killer			
Sodium arsenate	6.00	3.05	Deficient Misbranded
TRICALCIUM ARSENATE-COPPER			
Woolfolk Chemical Works, Ltd.			
Security Brand Tomato Dust			
Tricalcium arsenate Arsenic as metallic Arsenic water soluble (not more	60.00 22.69	22.84	Passed
than)	0.49 7.00	0.39 6.90	
внс			
Aceline Products Corp.			
Ace Flea Collar with Lindane for Cats			
Gamma isomer of BHC	0.75	0.41	Deficient
California Chemical Company-Ortho Div.			
Ortho Louse, Flea and Tick Powder  Gamma isomer of BHC	1.00	1.12	Passed
California Sarra Chamical Core			
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)		
Ortho Louse, Tick and Flea Powder Gamma isomer of BHC	1.00	0.95	Passed
Ortho Isotox Transplanter Solution			
Gamma Isomer of BHC	5.00	8.00	Excessive Active
do	5.00	8.04	Ingredient Excessive Active
do	5.00	7.95	Ingredient Excessive
			Active Ingredient
dodo	5.00 5.00	7.59 7.74	Passed Passed
Ortho Isotox 25 Wettable			
Gamma isomer of BHC	25.00	25.18	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Florida Control Control	DEMIS-TO	Q-SYIMAS	IA-OHE
Farmers Cooperative Exchange, Inc.			
FCX 1% Lindane Dust			
Gamma isomer of BHC	1.00	1.03	Passed
FCX 25% Lindane Wettable Spray Powder			
Gamma isomer of BHC	25.00	25.00	Passed
do	25.00	25.36	Passed
Dr. L. D. LeGear Medicine Co. (Now: Dr. LeGear, Inc.)			
Dr. LeGear's Louse Powder			
Gamma isomer of BHC	1.00	1.10	Passed
do	1.00 1.00	1.00 1.08	Passed Passed
do	1.00	1.08	Passed
do	1.00	1.03	Passed Passed
do	1.00	1.00	Passed
Science Products Co.			
Science Products 5% Lindane Spray			
Gamma isomer of BHC	5.00	7.89	Misbranded
			Not Registered
Taylor Chemical Co.			
Superkill Transplant Solution			
Gamma isomer of BHC	5.00	5.41	Passed
United Cooperatives, Inc.			
(Registered by Farmers Cooperative Exchang	je, Inc.)		
Unico BHC Emulsifiable Concentrate			
Gamma isomer of BHC	11.00	11.11	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand Benzex Wettable Benzene H	lexachloride		
Gamma isomer of BHC	6.00	5.86	Passed
Socurity Brand BHC Consentuate Employer	lo		
Security Brand BHC Concentrate Emulsifiab		11.01	Dans
Gamma isomer of BHC	11.50	11.91	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
BHC-ARAMITE-DDT-ZINEB			
Maxwell Insecticide Company, Inc.			
Maxwell's New Formula Rose Dust			
Gamma isomer of BHC	1.00 1.50 5.00	omer of BI	Passed
Zineb Theoretical chlorine	6.00 3.39	6.56 3.39	
Gamma isomer of BHC	1.00 1.50 5.00		Passed
Zineb Theoretical chlorine	6.00 3.39	5.76 3.32	
BHC-ARAMITE-FERBAM- METHOXYCHLOR-SULFUR			
E. I. du Pont de Nemours and Co.			
Du Pont Rose Insecticide and Fungicide			
Gamma isomer of BHC	1.00 1.50		Deficient
Ferbam Methoxychlor	7.60 5.00	7.14	
Sulfur	27.00 2.41	28.96 2.54	
The Sherwin-Williams Co. (Registered by Acme Quality Paints, Inc.)			
Sherwin-Williams Rose Dust			
Gamma isomer of BHC	1.00		Passed
Aramite Ferbam Methoxychlor	1.50 7.60 5.00	7.23	
Sulfur Theoretical chlorine	10.00	10.35	
Gamma isomer of BHC	1.00		Deficient
Aramite	1.50 7.60	6.75	
Methoxychlor Sulfur	5.00 10.00	10.50	
Theoretical chlorine	2.41	2.75	
BHC-CAPTAN-PIPERONYL BUTOXIDE- PYRETHRINS-ROTENONE			
Boyle-Midway, Inc.			
Antrol Multi Purpose Rose Spray Flower Bom	Ь		
Gamma isomer of BHC	1.00 0.500 0.250 0.025	0.150 0.022	Passed
Pyrethrins Rotenone Theoretical chlorine	0.025 0.200 0.900	Present 1.110	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Black Flag Flower Bomb			
Gamma isomer of BHC Captan Piperonyl butoxide Pyrethrins Rotenone	1.00 0.500 0.250 0.025 0.200	0.276 0.028 Present	Passed
Theoretical chlorine	0.900		
BHC-DDT			
California Chemical Company-Ortho Div.			
Ortho BHC-DDT 3-5 Dust			
Gamma isomer of BHCDDT	3.00 5.00	3.26 5.36	Passed
Ortho BHC-DDT 3-7 Dust			
Gamma isomer of BHCDDT	3.00 7.00	3.10 6.76	Passed
Ortho BHC-DDT 3-10 Dust			
Gamma isomer of BHC	3.00 10.00	3.37 10.54	Passed
Gamma isomer of BHC	3.00 10.00	3.00 10.09	Passed
California Spray-Chemical Corp.			
(Now: California Chemical Company-Ortho	DIV./		
Ortho BHC-DDT 3-10 Dust  Gamma isomer of BHC  DDT	3.00 10.00	3.65 10.60	Passed
Carolina Chemicals, Inc.			
Flight Brand BHC-DDT Dust 3-10-0			
Gamma isomer of BHC	3.00	3.40 11.11	Passed
Farmers Cooperative Exchange, Inc.			
FCX 3-5-0 BHC+DDT Dust			
Gamma isomer of BHC	3.00 5.00	3.26 5.41	Passed
Olin Mathieson Chemical Corp.			
Mathieson 3-5-0 Cotton Dust			
Gamma isomer of BHC	3.00 5.00	3.46 6.18	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mathieson 3-10-0 Cotton Dust			
Gamma isomer of BHC	3.00 10.00	2.90 11.25	Passed
Gamma isomer of BHCDDT	3.00 10.00	2.94 14.44	Passed
Niagara Chemical Div. Food Machinery and Chemical Corp.			
Niagara 3-10-0 Cotton Dust  Gamma isomer of BHC	3.00	3.74	Passed
DDT	10.00	9.65	r usseu
W. R. Peele Company, Inc.			
Pelco 3-10 Cotton Dust			
Gamma isomer of BHC	3.00 10.00	3.45 10.47	Passed
Ralston Purina Co.			
Purina Stock Spray Powder			
Gamma isomer of BHC	2.50 25.00	3.27 25.38	Passed
Swift and Co. Agricultural Chemical Div.	Carpo		
Swift's Gold Bear BD 37-D			
Gamma isomer of BHC	3.00 7.00	3.69 7.69	Passed
Taylor Chemical Co.			
Superkill 3-7-0 Cotton Dust			
Gamma isomer of BHC DDT	3.00 7.00	3.02 7.79	Passed
Superkill 3-10-0 Cotton Dust (Without Sulfu	ır)		
Gamma isomer of BHCDDT	3.00 10.00	3.57 10.82	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand 3-5-0 Cotton Dust			
Gamma isomer of BHCDDT	3.00 5.00	3.44 5.81	Passed
Security Brand 3-10-0 Cotton Dust			
Gamma isomer of BHC	3.00 10.00	3.72 11.00	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Security Brand Hex-Sol-Special Cotton Spra	y		
Gamma isomer of BHC	12.60 21.10	14.25 21.58	Passed
BHC-DDT-CAPTAN-FERBAM-SULFUR			
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)		
Ortho Rose Dust			
Gamma isomer of BHC DDT Captan Ferbam Sulfur Theoretical chlorine	1.00 5.00 7.50 3.50 30.00 5.89	2.82 31.01 6.35	Deficient
Gamma isomer of BHC DDT Captan Ferbam Sulfur Theoretical chlorine	1.00 5.00 7.50 3.50 30.00 5.89	2.84 30.51 5.57	Deficient
BHC-DDT-FERBAM-SULFUR			
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Rose Dust			
Gamma isomer of BHC DDT Ferbam Sulfur Theoretical chlorine	1.00 5.00 6.50 54.00 3.23	6.28 53.18 3.43	Passed
BHC-DDT-PARATHION			
Taylor Chemical Co.			
Superkill 3-10-1 Cotton Dust			
Gamma isomer of BHC DDT Parathion	3.00 10.00 1.00	3.68 10.55 0.95	Passed
BHC-DDT-PHALTAN-SULFUR			
California Chemical Company-Ortho Div.			
Ortho Rose Dust			
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	1.00 5.00 7.50 30.00 5.92	26.21 6.21	Deficient

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Ortho Rose Dust (Continued)			honorth at
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	5.00 7.50 30.00	30.03 6.00	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	1.00 5.00 7.50 30.00	30.38 6.20	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	5.00 7.50 30.00	29.85 6.32	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	5.00 7.50 30.00	30.59 6.08	Passed
California Spray-Chemical Corp. Now: California Chemical Company-Orth	o Div.)		
Ortho Rose Dust			
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	5.00 7.50 30.00	29.54 6.22	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	1.00 5.00 7.50 30.00	30.86 5.91	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	1.00 5.00 7.50 30.00	31.21	Passed
Gamma isomer of BHC DDT Phaltan Sulfur Theoretical chlorine	1.00 5.00 7.50 30.00	31.28 5.89	Passed
BHC-DDT-SULFUR			
armers Cooperative Exchange, Inc.			
CX 3-5-40 BHC+DDT+Sulfur Dust  Gamma isomer of BHC  DDT  Sulfur		3.95 5.95 39.53	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Taylor Chemical Co.			
Superkill 3-5-40 Cotton Dust			
Gamma isomer of BHC	3.00 5.00 40.00	3.23 5.75 41.34	Passed
Superkill 3-10-40 Cotton Dust			
Gamma isomer of BHC	3.00 10.00 40.00	3.00 11.09 42.16	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand 3-5-40 Cotton Dust			
Gamma isomer of BHC DDT Sulfur	3.00 5.00 40.00	3.78 5.66 44.18	Passed
1.00 Persed			
BHC-DDT-MALATHION-TEDION			
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div )		
Ortho Isotox Garden Spray	Consideration		
Gamma isomer of BHC	5.00		Passed
DDT	5.00	10.07	
Malathion	10.00	10.07	
Theoretical chlorine	7.34	7.60	
Gamma isomer of BHC	5.00		Passed
DDT Malathion	5.00 10.00	11.62	
Tedion	3.00		
Theoretical chlorine	7.34	8.24	
BHC-DEILDRIN			
California Spray-Chemical Corp. Now: California Chemical Company-Ortho			
Ortho Lawn-Garden Dieldrin Granules			
5.00	1.00		Savora
Gamma isomer of BHC Dieldrin Theoretical chlorine	1.00 4.00 2.96	2.87	Passed

 Gamma isomer of BHC
 1.00
 Passed

 Dieldrin
 4.00

 Theoretical chlorine
 2.96
 2.92

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
BHC-DEILDRIN-PYRETHRINS		. 63 T	
Penola Oil Co. (Now: Humble Oil and Refining Co.)	7.50 tau		
Flit Pressurized Roach and Ant Killer			
Gamma isomer of BHC Dieldrin Pyrethrins Theoretical chlorine	0.05 0.45 0.05 0.29	0.056 0.25	Passed
Gamma isomer of BHC	0.05 0.45 0.05 0.29	0.08 0.30	Passed
BHC-HEXACHLOROPHENE—2,2-THIOB (4,6-DICHLOROPHENOL)			
Dr. LeGear, Inc.			
Dr. LeGear's Flea, Tick Powder			
Gamma isomer of BHC Hexachlorophene 2,2-thiobis-(4,6-dichlorophenol)	1.00 1.00 1.00		Passed
Theoretical chlorine	1.65	1.73	alifornia Spro
Gamma isomer of BHC Hexachlorophene 2,2-thiobis-(4,6-dichlorophenol) Theoretical chlorine	1.00 1.00 1.00 1.65	1.78	Passed
Gamma isomer of BHC  Hexachlorophene 2,2-thiobis-(4,6-dichlorophenol)  Theoretical chlorine	1.00 1.00 1.00 1.65	1.76	Passed
Gamma isomer of BHC Hexachlorophene 2,2-thiobis-(4,6-dichlorophenol)	1.00 1.00 1.00	8 la remar	Passed
Theoretical chlorine  BHC-KARATHANE- KELTHANE-SEVIN-ZINEB	1.65	1.71 eminolida la	
Woolfolk Chemical Works, Ltd.			
Security Brand Pan Plant Dust			
Gamma isomer of BHC Karathane Kelthane Sevin Zineb Theoretical chlorine Theoretical nitrogen	1.00	5.41 1.96	Deficient
Gamma isomer of BHC Karathane Kelthane	1.00	Shower SE B	Dieldrin

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Security Dust Pan Plant Dust (Continued)			
Sevin Zineb Theoretical chlorine Theoretical nitrogen	5.00 6.00 1.69 1.03	5.06 1.96 1.44	
BHC-MALATHION-PHENOLS			
Carbola Chemical Company, Inc.			
Carbola, The Disinfecting White Paint			
Gamma isomer of BHC	0.22 0.66 1.60	0.31 0.32 Present	Passed
BHC-MALATHION-PINE OIL			
Ralston Purina Co.			
Purina Poultry Insecticide			
Gamma isomer of BHC Malathion Pine Oil	1.45 2.80 2.50	2.12 2.87 Present	Passed
BHC-METHOXYCHLOR-SULFUR			
Ralston Purina Co.			
Purina Insect Killer			
Gamma isomer of BHC Methoxychlor Sulfur Theoretical chlorine	0.50 2.50 10.00 1.13	11.06	Passed
Gamma isomer of BHC	0.50 2.50 10.00	9.91	Passed
Theoretical chlorine	1.13	1.27	
BHC-NICOTINE ALKALOIDS			
Dr. Salisbury's Laboratories			
Dr. Salisbury Vapo-Roost Spread			
Gamma isomer of BHC	1.30 4.00	1.36 4.02	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
BHC-OVEX-PHALTAN- PYRETHRINS-ROTENONE			
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho I	Div.)		
Ortho Rose and Flower Bomb			
Gamma isomer of BHC Ovex Phaltan Pyrethrins Rotenone Theoretical chlorine	0.50 0.125 0.50 0.025 0.20 0.57	0.032 Present 0.62	Passed
Gamma isomer of BHC Ovex Phaltan Pyrethrins Rotenone Theoretical chlorine	0.50 0.125 0.50 0.025 0.20 0.57	0.034 Present 0.56	Passed
Gamma isomer of BHC Ovex Phaltan Pyrethrins Rotenone Theoretical chlorine	0.50 0.125 0.50 0.025 0.20 0.57	0.032 Present 0.40	Deficient
BHC-SULFUR			
Ralston Purina Co.			
Purina Hog and Cattle Dusting Powder			
Gamma isomer of BHC	10.00	1.27 10.07	Passed
Gamma isomer of BHC	1.00	1.20	Passed
Gamma isomer of BHC Sulfur	1.00	1.13 9.52	Passed
Gamma isomer of BHC	1.00	1.23	Passed
Gamma isomer of BHC	1.00	1.20 9.78	Passed
BHC-TOXAPHENE	SGIOTOPIN		
Anchor Serum Co.		Laboratoria	Solisbury's
Anchor An-Tox Livestock Spray Concentrate			
Gamma isomer of BHC Toxaphene Theoretical chlorine	1.00 45.00 30.88	32.24	Not Registere

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho			
Ortho Kleen Stock Spray or Dip			
Gamma isomer of BHC	1.70 43.40 30.32	31.98	Passed
Ralston Purina Co.			
Purina Range Cattle Spray			
Gamma isomer of BHC	0.45 45.00 30.47	31.41	Passed
California Chemical Company-Ortho Div.			
Orthocide 75 Seed Protectant			
Captan	75.00	78.77	Passed
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)		
Orthocide 10 Dust			
Captan	10.00	10.02	Passed
Orthocide Garden Fungicide Captan	50.00	49.64	Passed
Stauffer Chemical Co.			
Stauffer Captan 50-W			
Captando	50.00 50.00	51.53 51.53	Passed Passed
CHLORDANE			
Acme Quality Paints, Inc.			
Acme 6% Chlordane Dust			
Chlordanedo	6.00 6.00	6.43 6.77	Passed Passed
Acme 45% Chlordane Spray Chlordane	45.00	46.43	Passed
California Chemical Company-Ortho Div.			
Ortho Chlordane 8 Emulsive			
Chlordane	72.00	73.82	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
California Spray-Chemical Corp.			
(Now: California Chemical Company-Ortho	Div.)		
Ortho-Klor 10 Chlordane Dust			
Chlordanedo	10.00	9.64	Passed
Ortho-Klor 44 Chlordane Spray	0.30		
Chlordane	44.00	45.51	Passed
Carter Insecticide and Chemical Company,	inc.		
Carolina Brand 40% Chlordane			
Chlordane	40.00	42.56	Not Registered
The d-Con Company, Inc.			
d-Con Antprufe, Special Formula AP 200			
Chlordane		2.17	Passed
Farmers Cooperative Exchange, Inc.			
FCX 5% Chlordane Dust			
Chlordane	5.00	4.93	Passed
FCX 10% Chlordane Dust			
Chlordane	10.00	9.35	Deficient
do	10.00	9.72 9.50	Passed Passed
			Copton
FCX Chlordane Emulsifiable Concentrate Chlordane	45.00	45.69	Passed
	45.00		tauffer Captar
FCX 50% Wettable Chlordane Powder	50.00	52.83	Passed
Chlordane do	50.00	51.40	Passed
Maxwell Insecticide Company, Inc.			
Maxwell Chlordane 8 Emulsifiable Concent	trate		
Chlordane	72.00	72.67	Passed
W. R. Peele Company, Inc.			
Pelco Chlordane 8 Emulsifiable Concentrate	е		
Chlordane	72.00	72.72	Passed
Polk Miller Products Corp.			
Sergents Skip-Bath			
Chlordane . S	0.25		Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Rigo Manufacturing Co.		: Dust	Jnico Chlordone
Kill-Ko 10% Chlordane Dust			
Chlordane	10.00	10.79	Passed
do		8.79	Deficient
Sears, Roebuck and Co.			
Cross Country 10% Chlordane Many Pur	200 1		
Chlordane do		9.29	Deficient Passed
10.00 10.57 mlamPossadigla2			norshiold 2
The Sherwin-Williams Co.			
(Registered by Acme Quality Paints, Inc.)			
Sherwin-Williams 6% Chlordane Dust			
Chlordane	6.00	6.09	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 10% Chlordane Granules Chlordane	NU-N-OCTYL		
			Passed
SA-50 Brand 10% Chlordane Dust			Hot Shot Qualit
Chlordane do		9.71	Passed Passed
SA-50 Brand 72% Chlordane Emulsion C			
Chlordane		75.20	Passed
0.090 0.082		rSmelln	Piperonyl
Taylor Chemical Co.			
Superkill 10% Granular Chlordane			
Chlordane	10.00	10.17	Passed
do		11.42	Passed Passed
doSuperkill 72% Chlordane Emulsifiable Co		outoxide	ly dissed
Chlordane Chiordane Emulsifiable Co	72.00	72.70	Passed
Cindidane	72.00	72.70	probability
Thompson-Hayward Chemical Co.			
T-H Chlordane E-4			
Chlordane 080.0 080.0	45.00	47.36	Passed
United Cooperatives, Inc.			
Registered by Farmers Cooperative Excha	nge, Inc.)		N-octyPet
Unico 5% Chlordane Granular			
Chlordane		4.89	Passed
do	5.00	6.54	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Unico Chlordane Dust			
Chlordane	6.00	6.09	Passed
do	6.00	7.84	Passed
Unico Chlordane Emulsifiable Concentrate			Chlordone
Chlordane	45.00	45.71	Passed
Unico Chlordane-8 Emulsifiable Concentrate	10.00		
Chlordane	73.00	72.94	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand 10% Chlordane Dust			
Chlordane	10.00	10.57	Passed
arcteri Brond 40 % Chloropad			
CHLORDANE-BORIC ACID			
Heller Laboratories, Inc.			
\$1000.00 Guaranteed Roach Killer			
Chlordane	0.20	0.30	Deficient
Boric acid	51.00	48.24	
CHLORDANE—DIAZINON—N-OCTYL BI DICARBOXIMIDE—PIPERONYL BUTOXID			
Hot Shot Quality Products, Inc.			
Hot Shot Diazinon Bug Killer		. 193	
Chlordane	1.00	1.04	Passed
Diazinon	0.333		
N-octyl bicycloheptene dicarboximide	0.150		
Piperonyl butoxide	0.090	0.082	
Pyrethrins	0.060	0.078	
Theoretical nitrogen	0.038	0.062	
Chlordane	1.00 0.333	1.00	Passed
Diazinon	0.333		
dicarboximide	0.150		
Piperonyl butoxide	0.090	0.096	
Pyrethrins Theoretical nitrogen	0.060 0.038	0.080 0.076	
Chlordane	1.00	1.12	Passed
Diazinon	0.333	1.12	russeu
N-octyl bicycloheptene	7,799,1931		
dicarboximide	0.150 0.090	0.110	
Piperonyl butoxide	0.060	0.080	
Theoretical nitrogen	0.038	0.051	
Chlordane	1.00	0.96	Passed
Diazinon	0.333		
N-octyl bicycloheptene dicarboximide	0.150		
dicarboximide	0.150	0.130	
Pyrethrins	0.060	0.080	
Theoretical nitrogen	0.038	0.090	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
CHLORDANE-LETHANE 384			
Swift and Co.			
Agricultural Chemical Div.			
End-O-Pest Ant and Lawn Insect Killer Dus			
Chlordane	8.00	8.11	Passed
Lethane 384	1.00	Present	
CHLORDANE-PIPERONYL BUTOXIDE-PYRETHRINS			
Colgate-Palmolive Co.			
Colgate Kan-Kil Ant and Roach Killer with	Chlordane		
Chlordane	2.00 0.092	2.57 0.114	Passed
Piperonyl butoxide	0.092	0.070	
Chlordane	2.00	2.05	Passed
Piperonyl butoxide	0.092	0.080	
Pyrethrins	0.046	0.060	V STR A STR
Chlordane Piperonyl butoxide	2.00 0.092	2.14 0.084	Passed
Pyrethrins	0.046	0.060	
The Dill Company, Inc.			
D-K Roach and Ant Killer			
Chlordane Piperonyl butoxide	2.00 0.075	2.03 0.070	Passed
Pyrethrins	0.075	0.025	
Chlordane	2.00	2.12	Passed
Piperonyl butoxide	0.115	0.120	
ryrethinis	0.046	0.080	
CHLORDANE-PYRETHRINS			
C-B Drug Co.			
C-B Double Action Insect Spray			
Chlordane Pyrethrins	2.00 0.034	2.55	Passed
Pyrethrins	0.034	0.070	
Gulf Oil Corp.			
Gulf Ant Roach Bomb			
Chlordane	2.00 0.08	1.93 0.10	Passed
· jicimiis	0.00	0.10	
COPPER			
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Tomato Dust			
Copper as metallic	7.00	7.00	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	<b>Decisions</b>
Unico Chienther List	HANE 384	DANE-LET	CHLORE
COPPER-SULFUR			
Armour Agricultural Chemical Co.		emical Div	Agriculturel Ch
Armagard Copper-Sulfur Dust for Peanuts			
Copper as metallic	4.00 85.00	3.65 84.97	Deficient
2,4-D COMPOUNDS		NDE-PYR	
Reasor Hill Corp.			Colgote-Falmoli
R-H Granular Weed Rhap-20			
Iso-octyl (2 ethyl hexyl) ester of 2,4-D	30.12	30.82	Passed
O. M. Scott and Sons Co.		. abbolud	
Scott's 4-XD Weed Control			
Alkanolomine salts of ethanol and isopropyl series of 2,4-D	2.65		Excessive
2,4-D equivalent	1.60	-3.75	Active Ingredient
Swift and Co. Agricultural Chemical Div.			
Gold Bear Amine Weed Control			
Dimethylamine salt of 2,4-D	49.00	48.16	Passed
0.046 0.060			
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchange)	ge, Inc.)		
Unico 2,4-D Amine Weed Killer			C-B Drug Co.
Dimethylamine salt of 2,4-D	49.00	47.50	Passed
Unico Lawn Weed Killer			
Dimethylamine salt of 2,4-D	49.00	51.15	Passed
DDD			
California Chamical Company Ortha Div			
California Chemical Company-Ortho Div.			
Ortho TDE 10 Dust	10.00	9.86	Passed
	10.00		1211Shr. Walnut mor
Ortho TDE 2 Spray DDD 9	25.00	26.42	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Cape Fear Chemicals, Inc.			
Tiger Brand 25% (TDE) Rhothane Emulsion	n Concentrate		
DDD do do do	25.00 25.00 25.00	25.05 25.74 25.56	Passed Passed Passed
Carolina Chemical Corp.			
Tobacco Spray Rhothane Emulsible Concent	rate		
DDD do	23.98 23.98	24.72 23.44 24.20	Passed Passed Passed
Carter Insecticide and Chemical Company,	Inc.		
Carolina Brand 25% TDE Emulsion Tobacc	o Insect Killer		
DDD	25.00	24.37	Passed
Coastal Chemical Corp.	nical Corp.		
TDE Emulsion			
25.00 26.34 Posed	24.00	25.48	Passed
Daly-Herring Co.			
Bacco 10% TDE Dust			
DDD	10.00	10.29	Passed
Bacco Spray Emulsifiable Concentrate			
DDD	23.76	29.04	Passed
do	23.76 23.76	24.30 26.17	Passed Passed
do		24.14	Passed
do	23.76	23.65	Passed
do	23.76	24.77	Passed
Farmers Cooperative Exchange, Inc.			
FCX 10% TDE Dust			
DDD	10.00	10.36	Passed
FCX TDE Emulsifiable Concentrate			
DDD	23.90	24.31	Passed
do		24.76	Passed
Graham Chemical Company, Inc.			Plonters TDE 2
Graham's Red Star 10% Rhothane Dust			

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
GurMiCo Chemicals, Inc.			
GurMiCo TDE 25 Emulsion			
DDD		26.10	Passed
do		27.08 25.92	Passed Passed
do		26.17	Passed
do		26.36	Passed
do	. 25.00 . 25.00	26.38 28.16	Passed Passed
Maxwell Insecticide Company, Inc.			
Maxwell 25% Rhothane Emulsion Conce	ntrate		
DDD	. 25.00	25.63	Passed
do	With the second second second	26.13	Passed
do		24.72 25.24	Passed Passed
do	South Barrier	25.69	Passed
25.00 Realing a Royald M.			
Niagara Chemical Div. Food Machinery and Chemical Corp.			
DDD 25 Miscible			
DDD	. 25.00	25.53	Passed
do		26.34	Passed
Olin Mathieson Chemical Corp.			
Mathieson TDE (DDD) 25% Emulsifiable	Concentrate		
DDD	. 25.00	26.67	Passed
do		24.95	Passed
do	. 25.00 . 25.00	28.25 28.27	Passed Passed
do	. 25.00	28.27	Passea
W. R. Peele Company, Inc.			
Pelco Rhothane Tobacco Dust			
DDD	. 10.00	9.93	Passed
do	10.00	8.86	Deficient
Pelco Tobacco Spray Emulsifiable Concent	trate		
DDD	23.75	24.63	Passed
do		24.28	Passed
do	. 23.75 . 23.75	23.83 24.45	Passed Passed
and the second s	. 20.73		daa
Planters Chemical Corp.			
Planters TDE 2 lb. Emulsion Concentrate			
DDD	23.80	23.90	Passed
do		23.98	Passed
do		22.86	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Agricultural Chemicals, Inc.			
Royal Brand Rhothane Spray Concentrate			
DDD	23.80	24.33	Not Registered
Taylor Chemical Co.			
Superkill 24% TDE Emulsifiable Concentrate	30 00 au		
DDD	24.00	25.72	Passed
do	24.00	26.44	Passed
do	24.00	25.94	Passed
dodo	24.00 24.00	25.80 24.27	Passed Passed
do	24.00	26.04	Passed
DDD-PARATHION			
Olin Mathieson Chemical Corp.			
Mathieson Tobacco Dust			
DDD	10.00	10.29	Passed
Parathion	1.00	0.95	russeu
DDD	10.00	10.72	Deficient
Parathion	1.00	0.92	
DDT			
Acme Quality Paints, Inc.			
Acme 5% DDT Dust			
DDT	5.00	5.71	Passed
Pestroy 25% DDT Concentrate			
DDT	25.00	25.63	Passed
Boyle-Midway, Inc.			
Black Flag 25% DDT Emulsion Concentrate			
DDT	25.00	24.72	Passed
25.00 25.27			
California Chemical Company-Ortho Div.			
Ortho DDT 5 Dust	trable Powde	W TOO a	Day Altely 505
DDT	5.00	4.93	Passed
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho D	Div.)		
Ortho DDT 10 Dust			
DDT	10.00	8.46	Deficient
Ortho DDT 50 Wettable	1000		00 4801 XX
DDT -900.0100 0.1	50.00	51.06	Passed
	30.00	31.00	i usseu

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Cape Fear Chemicals, Inc.			
Tiger Brand 10% DDT Dust			
DDT	10.00	9.21	Deficient
Carolina Chemical Corp.		60 le	Taylor Chemica
DDT	23.98	18.61	Deficient Not Registered
Carter Insecticide and Chemical Company, I	nc.		
Carolina Brand 25% DDT Emulsion Concer	itrate		
DDT	25.00	26.46	Passed
Carolina Brand 50% DDT Wettable Powder			
DDT	50.00	51.78	Passed
C-B Drug Co.			
C-B Drug Co. C-B DDT Insect Spray			
DDT	5.00	7.25	Passed
Coastal Chemical Corp.		•	
DDT Emulsion			
DDT	25.00	28.16	Passed
do	25.00 25.00	25.35 25.32	Passed Passed
5.00 5.71 Posundos			
Daly-Herring Co.			
Dee Aitch 10% DDT Dust			
DDT do	10.00 10.00	10.21 10.29	Passed Passed
Dee Aitch 25% DDT Emulsifiable Concentre		ma TOO de	
DDT	25.00	24.99	Passed
dodo	25.00 25.00	25.77 25.53	Passed Passed
Dee Aitch 50% DDT Wettable Powder	25.00	23.33	r usseu
DDT	50.00	48.93	Passed
Farmers Cooperative Exchange, Inc.			
FCX 5% DDT Dust			
DDT	5.00	5.14	Passed
FCX 10% DDT Dust			
DDT	10.00	10.00	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
FCX DDT Emulsifiable Concentrate			
DDT	24.00	24.12	Possed
do	24.00	25.04	Passed
do	24.00	24.39	Passed
do	24.00	25.14	Passed
FCX 50% Wettable DDT Powder		impany, Inc	. R. Poela Co
DDT	50.00	51.06	Passed
do	50.00 50.00	49.28 52.14	Passed Passed
do	50.00	52.14	Passed
<b>do</b>	910111193/10	D aldaitielu	ma dascu
Graham Chemical Company, Inc.			
Graham's Red Star Agricultural 5% DDT D	Oust		
DDT	5.00	4.79	Passed
do	5.00	4.93	Passed
GurMiCo Chemicals, Inc.			
GurMiCo 5% DDT Dust			
13 GO 23.73 FOSSEG	5.00	4.86	Passed
DDT	5.00	4.00	Passea
GurMiCo 25% DDT Emulsion			
DDT	25.00	26.69	Passed
do	25.00	25.28	Passed
Hopkins Agricultural Chemical Co.		uring Co.	
DOT-ALLSTHON, AUTHANIS SEA			
Hopkins 50% DDT Wettable Powder	2000		
DDT	50.00	43.20	Deficient
			Not
the state of the s			Registered
Maxwell Insecticide Company, Inc.			
Maxwell 25% DDT Emulsion Concentrate	0.190		Pound
DDT	25.00	26.38	Passed
Niagara Chemical Div.			
Food Machinery and Chemical Carp.			
Niagara Niatox 5 Dust			
DDT	5.00	5.92	Passed
	3.00	3.72	r usseu
D. E. Linck Company, Inc.			
Tat 35% DDT Solution Concentrate			
DDT	35.00	23.63	Deficient
10.00 10.29 Possed CO		192901	
Olin Mathiesan Chemical Carp.			
Olin Mathiesan Chemical Carp.			
Olin Mathiesan Chemical Carp.  Mathieson DDT 10% Dust  DDT	10.00	8.29	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mathieson DDT 2 lb. Emulsifiable Liquid			
DDT	25.00	24.90	Passed
do	25.00	26.20	Passed
do	25.00	25.36	Passed
W. R. Peele Company, Inc.			
Pelco 10% DDT Dust			
DDT	10.00	11.85	Passed
Pelco DDT Emulsifiable Concentrate			
DDT	23.76	23.54	Passed
do	23.76	23.58	Passed
do	23.76	23.33	Passed
Planters Chemical Corp.			
Planters DDT 2 lb. Emulsion Concentrate			
DDT	23.80	30.01	Passed
do	23.80	23.86	Passed
do	23.80	23.93	Passed
do	23.80 23.80	23.35 23.69	Passed Passed
do	23.80	23.77	Passed
do	23.80	23,44	Passed
Rigo Manufacturing Co.		•	
Kill-Ko 50% DDT Wettable Powder	micul Co.		
DDT	50.00	51.78	Passed
Smith Seed and Feed Co.			
Old Belt Brand Tobacco Flea Beetle Dust			
222	F 00	4.82	tagent Howards
DDT	5.00	4.02	Passed
Southern Agricultural Insecticides, Inc.			POPEG
SA-50 Brand 5% DDT Dust			liagore Chem
DDT	5.00	5.30	Passed
do	5.00	5.14	Passed
do do	5.00 5.00	5.43 4.75	Passed Passed
do	5.00	5.82	Passed
do	5.00	5.07	Passed
do	5.00	5.71	Passed
SA-50 Brand 10% DDT Dust			
DDT	10.00	10.29	Passed
do	10.00	10.95	Passed
dodo	10.00 10.00	10.50	Passed Passed
do	10.00	10.14	Passed
do	10.00	10.76	Passed
do	10.00	9.86	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
SA-50 Brand 10% DDT Dust (Continued)			
do	10.00 10.00 10.00	10.22 9.86 10.14	Passed Passed Passed
Taylor Chemical Co.			
Superkill 25% DDT Emulsion DDT	25.00	25.05	Not Registered
Thompson-Hayward Chemical Co.			
T-H Ded-Tox Anti-Resistant 50-10 Wettabl DDT	e Powder 50.00	51.41	Possed
Woolfolk Chemical Works, Ltd.			
Security Brand 10% DDT Dust DDT	10.00	10.45	Passed
Security Brand DDT Concentrate Emulsifiab	ole Spray 23.50	24.19	Passed
Security Brand 50% DDT Wettable DDT	50.00	50.34	Passed
DDT-ALLETHRIN-LETHANE 384			
Colonial Stores, Inc. (Registered by Stalfort Pressure-Pak, Inc.)			Mock Flog Inse
3D Insecticide Aerosol Spray			
DDT Allethrin Lethane 384	2.00 0.125 1.00	2.25 Present Present	Passed
DDT Allethrin Lethane 384	2.00 0.125 1.00	2.15 Present Present	Passed
DDT-ALLETHRIN-LETHANE 384-N-0 BICYCLOHEPTENE DICARBOXIMID			
Airosol Company, Inc.			
Jet Insect Killer			Acme Rose Du
DDt Allethrin Lethane 384 N-octyl bicycloheptene dicarboximide	2.00 0.10 1.50	Present	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Jet Insect Killer (Continued)			
DDT Allethrin Lethane 384 N-octyl bicycloheptene	2.00 0.10 1.50	2.06 Present	Passed
dicarboximide	0.25 0.12	0.17	
DDT Allethrin Lethane 384 N-octyl bicycloheptene	2.00 0.10 1.50	2.26 Present	Passed
dicarboximide Theoretical nitrogen	0.25 0.12	0.19	
C-B Drug Co.			
C-B Fly and Mosquito Aerosol Killer  DDT  Allethrin  Lethane 384  N-octyl bicycloheptene	2.00 0.10 1.06	1.73 Present	Deficient
dicarboximide	0.75 0.113	0.118	
DDT-ALLETHRIN-METHOXYCHLOR- PIPERONYL BUTOXIDE	- didorraty	100.65051	
Boyle-Midway, Inc.			
Black Flag Insect Bomb			
DDT Allethrin Methoxychlor Piperonyl butoxide Theoretical chlorine	1.00 0.22 1.00 0.25 0.80	Present 0.21 0.86	Passed
DDT Allethrin Methoxychlor	1.00 0.22 1.00	Present	Passed
Piperonyl butoxide Theoretical chlorine	0.25 0.80	0.23 0.90	
DDT-CAPTAN-KARATHANE-MALATHION	THAME BEAT		
Acme Quality Paints, Inc.			
Acme Rose Dust			
DDT Captan Karathane Malathion Theoretical nitrogen Theoretical chlorine	5 00 7.00 0.675 4.00 0.38 4.98	2.78 0.48 5.43	Deficient

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Acme Rose Dust (Continued)			
DDT	5.00		Passed
Captan	7.00		1 dased
Karathane	0.675		
Malathion	4.00	4.21	
Theoretical nitrogen	0.38	0.48	
Theoretical chlorine	4.98	5.25	
600			
DDT-CAPTAN-MALATHION			
Sears, Roebuck and Co.			
Cross Country Rose Spray			
DDT	10.00		Passed
Captan	5.00		
Malathion	5.00	4.80	
Theoretical chlorine	6.77	8.10	
Cross Country Rose Dust			
DDT	5.00		Passed
Captan	5.00		. 55555
Malathion	4.00	4.35	
Theoretical chlorine	4.27	4.92	
DDT	5.00		Deficient
Captan	5.00	12.02	
Malathion	4.00	3.11	
Theoretical chlorine	4.27	4.44	
DDT	5.00		Excessive
Captan	5.00		Active
Malathion	4.00	4.05	Ingredien
Theoretical chlorine	4.27	8.68	
DDT-CHLORDANE			
Graham Chemical Co.			
5.00	11-1		
Bug-Death Roach Powder 6% DDT 4% C			Pointhion
DDT	6.00		Passed
Chlordane	4.00	5.20	
Theoretical chlorine	5.56	5.39	
Telescon Spacial			
DDT-COPPER			
Farmers Cooperative Exchange, Inc.			
FCX 7-5 Potato and Tomato Dust			
DDT	5.00	5.00	Passed
Copper as metallic	7.00	6.96	russea
Copper as metanic		0.90	
DDT	5.00	4.86	Passed
Copper as metallic	7.00	7.04	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mike, Inc.			
101 Brand Potato Dust			
DDT Copper as metallic	5.00 6.50	4.64 6.67	Deficient
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Potato Dust with 5% DDT			
DDT	5.00 6.50	5.89 6.41	Passed
DDT Copper as metallic	5.00 6.50	5.18 6.21	Passed
DDT	5.00 6.50	6.07 6.22	Passed
DDT-COPPER-PARATHION-SULFUR			
5.00			
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 11/2 % Parathion Dust			
DDT Copper as metallic Parathion Sulfur	5.00 3.00 1.50 25.00	4.93 3.06 1.62 26.56	Passed
5.00 Active			
DDT-DDD-PARATHION			Malathian
Cape Fear Chemicals, Inc.	DANE	OT-CHLOR	
Tiger Brand Thripple Quick 1-5-5 Tobacco	Dust	-5 has	
DDT	5.00		Passed
DDD	5.00 1.00	0.99	
Theoretical chlorine	4.72	4.79	
Maxwell Insecticide Company, Inc.			
Maxwell 5-5-1 Tobacco Dust	939		
DDT	5.00		Passed
DDD	5.00	rative Exch	ogood man
Parathion Theoretical chlorine	1.00 4.72	0.95 5.00	
DDT	5 00	metallia	Passed
DDD	5.00		7000
Parathion	1.00	0.95	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
W. R. Peele Company, Inc.			
Pelco 5-5-1 Tobacco Dust DDT-TDE-Parath	nion		
DDT DDD Parathion Theoretical chlorine	5.00 5.00 1.00 4.72	0.87 4.57	Deficient
DDT DDD Parathion Theoretical chlorine	5.00 5.00 1.00 4.72	1.00	Passed
DDT DDD Parathion Theoretical chlorine	5.00 5.00 1.00 4.72	0.98 4.57	Passed
DDT-ENDRIN			
California Chemical Company-Ortho Div.			
Ortho Endrin-DDT-1-1 Emulsiye			
DDT Endrin Theoretical chlorine	12.20 12.20 12.91	13.02	Passed
DDT Endrin Theoretical chlorine	12.20 12.20 12.91	13.31	Passed
DDT Endrin Theoretical chlorine	12.20 12.20 12.91	13.56	Passed
Cape Fear Chemicals, Inc.			
Tiger Brand Tobbaco Spray			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.55	Passed
Carolina Chemical Corp.			
Tobacco Special			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.59	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	13.65	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.62	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Tobacco Special (Continued)			
DDT	16.50		Passed
Endrin Theoretical chlorine	6.50 11.88	11.33	
DDTEndrinTheoretical chlorine	16.50 6.50 11.88	12.30	Passed
Carter Insecticide and Chemical Company, I	nc.		
Carolina Brand En-D Tobacco Poison			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.27	Passed
DDT	16.50 6.50	SALES IN	Passed
Theoretical chlorine	11.88	12.26	-1007
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.03	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.13	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.65	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.17	Passed
Coastal Chemical Corp.			
Worm and Beetle Spray Emulsible Concentr			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.12	Passed
Daly-Herring Co.			
Bacco Beetle Spray Emulsifiable Concentrate	e		
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	13.52	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.30	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.83	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Farmers Cooperative Exchange, Inc.		moony, Inc	R. Peele Cor
FCX Tobacco Special			
DDT Endrin Theoretical chlorine	5.00 1.50 3.34	3.55	Passed
Graham Chemical Company, Inc.			
Graham's Red Star End-DT			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.15	Passed
GurMiCo Chemicals, Inc.			
GurMiCo Liquid Tobacco Control			
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	13.81	Passed
Maxwell Insecticide Company, Inc.			
Maxwell Tobacco Spray No. 2 Emulsifiable	Concentrate		
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.85	Passed
DDT	16.50		Passed
Endrin Theoretical chlorine	6.50 11.88	12.98	
DDT	16.50		Passed
Endrin	6.50 11.88	12.10	
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.90	Passed
	11.00	11.89	
Olin Mathieson Chemical Corp.			
Mathieson End-DT Emulsifiable  DDT	12.10		Danad
Endrin Theoretical chlorine	12.10 12.10 12.81	14.00	Passea
DDT Endrin Theoretical chlorine	12.10 12.10 12.81	13.38	Passed
DDT	12.10		Passed
Endrin Theoretical chlorine	12.10	12.83	Endeln . Theoretic
DDT Endrin Theoretical chlorine	12.10 12.10 12.81	12.98	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
W. R. Peele Company, Inc.			mers Cooper
Pelco 55 Tobacco Spray Emulsifiable Conc	entrate		
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.18	Passed
DDT Endrin Theoretical chlorine	16.50 6.50	11.98	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.16	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	12.04	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.94	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.68	Passed
DDT Endrin Theoretical chlorine	16.50 6.50 11.88	11.95	Passed
Pelco Endrin and DDT Emulsion			
DDT Endrin Theoretical chlorine	11.99 12.20 12.81	12.65	Passed
DDT Endrin Theoretical chlorine	11.99 12.20 12.81	12.37	Passed
DDT Endrin Theoretical chlorine	11.99 12.20 12.81	13.13	Passed
		TO ENUTE	
Planters Chemical Corp.			
Planters Endrin-DDT Emulsible Concentrat			
DDT Endrin Theoretical chlorine	12.20 11.90 12.25	12.21	Passed
DDT Endrin Theoretical chlorine	12.20 11.90 12.25	12.45	Passed
DDT Endrin Theoretical chlorine	12.20 11.90 12.25	12.28	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Agricultural Chemicals, Inc.			
Royal Brand Endrin-DDT Emulsible Concen	trate		
DDT Endrin Theoretical chlorine	18.30 5.90 12.45	12.72	Not Registered
Taylor Chemical Co.			
Superkill Endrin-DDT 1-1 Emulsive DDT Endrin Theoretical chlorine	12.20 12.20 12.91		
DDT Endrin Theoretical chlorine	12.20 12.20 12.91	13.30	Passed
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchan	ge, Inc.)		
Unico "513" Tobacco and Cotton Spray DDT Endrin Theoretical chlorine	15.80 6.40 11.47	11.91	Passed
DDT Endrin Theoretical chlorine	15.80 6.40 11.47	11.99	Passed
DDT Endrin Theoretical chlorine	15.80 6.40 11.47	11.85	Passed
DDT Endrin Theoretical chlorine	15.80 6.40 11.47	13.96	Passed
DDT Endrin Theoretical chlorine	15.80 6.40 11.47	12.15	Passed
DDT-FERBAM			
California Chemical Company-Ortha Div.			
Ortho Ferbam-DDT 11.4-5 Dust	BEE 3	HARTELI-T	
DDT Ferbam	5.00 11.40	4.93	Passed
Farmers Cooperative Exchange, Inc.	. 217	Act de que	
FCX 15% Fermate-5% DDT Dust			
DDT Ferbam	5.00 11.40	5.14 11.15	Passed
DDT Ferbam	5.00 11.40	4.93 11.95	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Niagara Chemical Div.			
Food Machinery and Chemical Corp.			
Niagara Ferbam 11.4 DDT 5 Dust	5.00		Endin
DDT Ferbam	5.00 11.40	5.39 11.33	Passed
DDT-FERBAM-MALATHION- PYRETHRINS-SULFUR			
O. M. Scott and Sons Co.			
Scotts Haze			
DDT Ferbam Malathion Pyrethrins Sulfur	5.00 7.50 4.50 0.02 28.00	5.57 6.80 3.02 0.09 27.48	Deficient
DDT-FERBAM-SULFUR			
Farmers Cooperative Exchange, Inc.			
FCX Rose Dust	u. (A.50)		
DDT Ferbam Sulfur	5.00 7.60 75.00	4.86 7.18 69.01	Deficient
DDT Ferbam Sulfur	5.00 7.60 75.00	5.00 6.77 73.31	Deficient
DDT-KARATHANE-MALATHION	13.05		
Sears, Roebuck and Co.			
Cross Country Liquid Spray for Roses			
DDT Karathane Malathion	21.25 4.00 26.75	22.17 4.02 28.66	Passed
DDT-LETHANE 384			
Boyle-Midway, Inc.			
Black Flag Insect Spray			
DDT Lethane 384	5.00 1.00	5.44 Present	Passed
DDT Lethane 384	5.00 1.00	5.43 Present	Passed
DDT Lethane 384	5.00 1.00	5.28 Present	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
	annel sonsit	Bes ortoge	act deals and
DDT-MALATHION			
Rigo Manufacturing Co.			
Kill-Ko Pecan and Fruit Tree Spray Concent	rate		
DDT	11.30 14.50	12.23 14.78	Passed
DDT	11.30 14.50	13.71 13.86	Passed
Sears, Roebuck and Co.			wiles harrisely solid
Cross Country Pecan and Fruit Tree Spray (	Concentrate		
DDT	11.50 14.50	12.62 15.05	Passed
DDT-MALATHION-PYRETHRINS			
O. M. Scott and Sons Co.			
Scotts Mosquito and Fly Control Boon			
DDT Malathion Pyrethrins	5.00 4.50 0.10	5.36 4.14 0.14	Deficient
DDT-METHOXYCHLOR-PIPERONYL BUTOXIDE-PYRETHRINS-ROTENONE			
Boyle-Midway, Inc.			
Black Flag House and Garden Insect Killer			
DDT Methoxychlor Piperonyl butoxide Pyrethrins Rotenone Theoretical chlorine	1.00 1.00 0.25 0.20 0.10 0.80	0.23 0.24 Present 0.96	Passed
DDT Methoxychlor Piperonyl butoxide Pyrethrins Rotenone Theoretical chlorine	1.00 1.00 0.25 0.20 0.10 0.80	0.19 0.24 Present 1.01	Passed
DDT Methoxychlor Piperonyl butoxide Pyrethrins Rotenone Theoretical chlorine	1.00 1.00 0.25 0.20 0.10 0.80	0.22 0.20 Present 0.86	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decision
New Black Flag Patio and Picnic Spray			
DDT	1.00		Passed
Methoxychlor	1.00 0.25	0.20	
Piperonyl butoxide	0.20	0.30	
Rotenone	0.10	Present	
Theoretical chlorine	0.80	1.01	
DDT-METHYL PARATHION			
Atlas Agricultural Chemicals, Inc.			
Atlas 2.5-10 Methyl-DDT			
DDT	10.00	11.14	Passed
Methyl parathion	2.50	2.42	
California Chemical Company-Ortho Div.			
Ortho Methyl Parathion-DDT 2.5-10 Dust			
	10.00	0.72	Danad
DDT Methyl parathion	10.00 2.50	9.72 2.46	Passed
Common Dust	nood formo	and Fly C	
Carolina Chemicals, Inc.	•		
Flight Brand Methyl Parathion DDT Dust 2	1/2-7-0		
DDT	7.00	7.95	Passed
Methyl parathion	2.50	2.40	
Flight Brand Methyl Parathion DDT Dust 2		PYRETHRI	-adixoru
DDT	10.00 2.50	9.93 2.51	Passed
Methyl parathion	2.50	2.51	
Taylor Chemical Co.			
Superkill 21/2 P-10 Dust			
DDT	10.00	10.22	Deficient
Methyl parathion	2.50	1.91	
DDT	10.00	10.21	Passed
Methyl parathion	2.50	2.75	
Voolfolk Chemical Works, Ltd.			
ecurity Brand 2½ % Methyl Parathion 5%	6 DDT Cotton	Dust	
DDT	5.00	4.79	Passed
Methyl parathion	2.50	2.54	
ecurity Brand 2½% Methyl Parathion 10	% DDT Cotton	Dust	
DDT	10.00	9.86	Passed
Methyl parathion	2.50	2.40	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
DDT-METHYL TRITHION	LSULFUR	TOTHTAR	N9-700
Olin Mathieson Chemical Corp.			
Mathieson Super X Super Cattan Dust			
DDT	7.00		Passed
Methyl trithion Theoretical chlorine	3.00 3.84	3.97	
Stauffer Chemical Co.			
DDT-Methyl Trithion 5-3 Dust			
DDT	5.00		Passed
Methyl trithion	3.00 2.84	3.07	
		3.07	TOO
DDT Methyl trithion	5.00 3.00		Passed
Theoretical chlorine	2.84	2.93	
DDT-Methyl Trithion 10-3 Dust			
DDT	10.00		Passed
Methyl trithion	3.00	( 00	
Theoretical chlorine	5.34	6.00	
DDT-Methyl Trithion 2-2 E			- 100
DDT	22.10 22.10		Passed
Theoretical chlorine	13.53	13.42	
5.00 5.25 60			
Olin Mathieson Chemical Corp.			
Mathieson DDT-Methyl Trithian Emulsifiab	le Liquid		
DDT Methyl trithion	22.10 22.10		Passed
Theoretical chlorine	13.53	13.90	
Woolfolk Chemical Works, Ltd.			
Security Brand Tri-Me 21/2-7 Cotton Dust			
DDT8102.1	7.00		Passed
Methyl trithion	2.50 3.78	4.08	
Security Brand Tri-Me 2½-10 Cotton Dust	0.70	4.00	
DDT	10.00		Passed
Methyl trithion	2.50		russeu
Theoretical chlorine	5.28	5.54	
Security Brand Tri-Me Catton Spray 2-2			
DDT	22.30		Passed
Theoretical chlorine	22.30 13.65	14.89	
DDT	22.30		
Methyl trithion	22.30		Passed
Theoretical chlarine	13.65	14.01	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
DDT-PARATHION-SULFUR			
California Chemical Company-Ortho Div.			
Ortho DDT-Parathion-Sulfur 5-1.5-25 Dust			
DDT Parathion Sulfur	5.00 1.50 <b>2</b> 5.00	5.21 1.76 24.91	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 11/2 % Parathion Dust with 5	% DDT		
DDT Parathion Sulfur	5.00 1.50 25.00	5.28 1.50 26.11	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.29 1.52 27.02	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.25 1.63 25.23	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.46 1.57 26.84	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.22 1.60 26.47	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.25 1.65 25.97	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	4.96 1.50 25.41	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.32 1.61 27.11	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	4.93 1.78 24.83	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	4.86 1.44 24.77	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.07 1.47 26.03	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	6.42 1.51 26.91	Passed
DDT Parathion Sulfur	5.00 1.50 25.00	5.29 1.85 24.35	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
SA-50 Brand 1 ½ % Parathion Dust with 5	% DDT (Conti	inued)	
DDT	5.00	5.29	Passed
Parathion	1.50 25.00	1.61 25.82	
DDT	5.00	5.25	Passed
Parathion Sulfur	1.50 25.00	1.63 27.54	
DDT-PIPERONYL BUTOXIDE-PYRETHRIN	is a manage		
A-Penn Oil Co.			
Kilzum Aerosol Insect Spray			
DDT Piperonyl butoxide	2.00 0.50	2.02 0.54	Passed
Pyrethrins	0.20	0.22	
DDT	2.00	2.10	Passed
Piperonyl butoxide	0.50 0.20	0.44	
	0.20	0.20	
Rigo Manufacturing Co.			
Kill-Ko Super Strength Plus 5% DDT	5.00	4.99	Passed
Piperonyl butoxide	0.30	0.26	Passea
Pyrethrins	0.03	0.058	
DDT-PYRETHRINS			
GurMiCo Chemicals, Inc.			
GurMiCo Spray Insecticidal Space Spray			
DDT	3.75	4.78	Passed
Pyrethrins	0.02	0.04	
DDT-ZINEB			
Farmers Cooperative Exchange, Inc.			
FCX 6.5% Zineb-5% DDT Dust			
DDT Zineb	5.00 6.50	4.86 6.12	Deficient
The state of the s	0.50	on Lengths	
Niagara Chemical Div. Food Machinery and Chemical Corp.			
Niagara Zineb 6.5 Niatox 5 Dust			
DDT Zineb	5.00	5.32	Deficient
Zineb	6.50	5.91	
DDVP			
Agricultural Specialties Star-Bar Diy.			
Starbar Strike Instant Fly Syrup			
DDVP	0.20	0.29	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Rigo Manufacturing Co.			
Kill-Ko Fly and Mosquito Spray with DDVP			
DDVP	0.50	1.31	Excessive Active Ingredient
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchange)	je, Inc.)		
Unico DDVP Stock Spray			
DDVP	1.00	1.49	Passed
DDVP-CHLOROTHION-PERTHANE			
Agricultural Specialties			
Star Bar Div.			
Starbar Malrin 576 Sugar Bait			
DDVP Chlorothion	0.20		Passed
Perthane	2.00		
Theoretical chlorine	0.74	0.70	
0.30 0.26			
DDVP-MALATHION	1.50	•	
Rigo Manufacturing Co.			
Kill-Ko Fly Bait	199		
DDVP Malathion	0.50		Passed
Theoretical phosphorus	0.16	0.16	
DIELDRIN		LUE TOO	
Atlas Agricultural Chemicals, Inc.		DDT-ZIN	
Atlas 2% Dieldrin Dust			rmers Coope
Dieldrin	2.00	3.13	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Lawn-Diel 21/2 % Dieldrin Gra	onules 3 look	cal Div.	
Dieldrin do	2.50 2.50	2.58 2.62	Passed Passed
SA-50 Brand 10% Dieldrin Granules Dieldrin	10.00	10.57	Passed
		avdd	
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchange	ge, Inc.)		
Unico 5% Dieldrin Granular	1 5 quivê		
Dieldrin	5.00	5.85	Passed

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Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
DIELDRIN-DDVP			
Boyle-Midway, Inc.			
New Black Flag Ant and Roach Killer with	New DDVP		
Dieldrin DDVP	0.30 0.20		Passed
Theoretical chlorine	0.23	0.23	
DIELDRIN-METALDEHYDE			
California Chemical Company-Ortho Div.			
Ortho de luxe Bug-Geta Pellets			
Dieldrin	0.50 2.75	0.58 4.17	Excessive Active
1.00 1.25 Passada			Ingredient
California Spray-Chemical Corp.	D'		
(Now: California Chemical Company-Ortho	Div.)		
Ortho de luxe Bug-Geta Pellets  Dieldrin	1.00	1.40	Excessive
Metaldehyde	2.75	4.27	Active Ingredient
Dieldrin Metaldehyde	1.00 2.75	1.30	Passed
	19.90	20.03	
DIELDRIN-SULFUR			
Taylor Chemical Co.			
Superkill Dieldrin-Sulfur Peach Spray	19.50		
Dieldrin Sulfur	3.85 86.76	4.33 84.33	Passed
DIELDRIN-ZINEB			
W. R. Grace and Co. Davison Chemical Div.			Acme Endeln E
Naco 8% Dithane and 1½% Dieldrin			
Dieldrin Zineb	1.50 6.00	1.44 5.87	Passed
DIBROM			
California Chemical Company-Ortho Div.			
Ortho Dibrom 4 Dust	4.00	4.71	Passad
Ortho Fly Killer D	4.00	4.71	Passed
Dibrom	41.00	40.93	Passed

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Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Carter Insecticide and Chemical Company,	Inc. ontonono		
Carolina Brand Endrin Emulsifiable Concent	trate		
Endrin	19.50	19.31	Passed
dodo	19.50 19.50	19.97 19.73	Passed Passed
do	19.50	19.81	Passed
Coastal Chemical Corp.			
Endrin Emulsible Concentrate			
Endrin	19.50	19.87	Passed
do	19.50	19.53	Passed
Daly-Herring Co.			
Dee Aitch Endrin Emulsible Concentrate			
Endrin	19.50	20.31	Passed
dodo	19.50 19.50	20.20 20.00	Passed Passed
do	19.50	23.64	Passed
Farmers Cooperative Exchange, Inc.			
FCX Endrin Emulsifiable Concentrate			
Endrindo	18.90 18.90	18.44	Passed Passed
do do	18.90	20.25	Passed
do	18.90	20.03	Passed
Graham Chemical Company, Inc.			
Graham's Red Star Endrin Emulsifiable Con	centrate		
Endrin	19.50	19.11	Passed
GurMiCo Chemicals, Inc.			
GurMiCo Endrin Emulsion			
Endrin do	18.50 18.50	21.13	Passed Passed
	16.50	20.10	Passea
Endrin Emulsion	10.50	20.04	Toyler Charles
Endrin	19.50 19.50	20.94	Passed Passed
			Season Holyspace
Olin Mathieson Chemical Corp.			
	ble Concentre	n Empleific	
Endrin	19.80	20.51	Passed
W. R. Peele Company, Inc.			
Pelco Endrin Emulsifiable Concentrate			
Endrin	19.50	19.76	Passed
do	19.50	19.17	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Pelco Endrin Emulsifiable Concentrate (Cor	ntinued)		
do d	19.50 19.50 19.50 19.50 19.50 19.50	20.20 20.15 20.02 19.68 19.94 19.28	Passed Passed Passed Passed Passed Passed
Planters Chemical Corp.			
Planters Endrin Emulsible Concentrate			
Endrin do do do do do do do do do	19.50 19.50 19.50 19.50 19.50 19.50 19.50 19.50	19.19 19.26 19.14 19.05 19.20 19.93 19.75 19.54	Passed Passed Passed Passed Passed Passed Passed Passed
Quality Chemical Corp. (Now: Carolina Chemical Corp.)			
Endrin Emulsible Concentrate	Concentrate		
Endrin	19.50	19.22	Passed
Swift and Co. Agricultural Chemicals Div.			
Swift's Gold Bear Insecticide Dust E2 Endrin	2.00	2.40	Passed
Swift's Gold Bear Endrin E 1.6E Endrin	19.90	20.62	Passed
Taylor Chemical Co.			
Superkill 2% Endrin Dust			
Endrin	2.00	2.40	Passed
Superkill Endrin Emulsifiable Concentrate			
Endrin	19.50	20.17	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand Endri-Sol			
Endrin	18.50	19.58	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
	Continue	1,052 vo	isk wana s
ENDRIN-PARATHION			
Niagara Chemical Div. Food Machinery and Chemical Corp.			
Niagara Phoskil Endrin Miscible			
EndrinParathion	212122	21.72 10.39	Deficient
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Dust Containing 1½% End	rin 1% Parath	ion	
Endrin	1.50 1.00	2.07 1.84	Passed
ENDRIN-TRITHION			
Swift & Co. Agricultural Chemical Div.			
Swift's Gold Bear Super Guard 152			
Endrin Trithion Theoretical chlorine	1.50 2.00 1.05	1.24	Passed
FERBAM			
Graham Chemical Company, Inc.			
Graham's Red Star ''Fermate Dust''			
Ferbam	11.40	12.21	Passed
Olin Mathieson Chemical Corp.			
Mathieson Ferbam Dust			
Ferbam do	11.40 11.40	11.99 11.83	Passed Passed
FERBAM-DICHLONE-SULFUR			
Atlas Agricultural Chemical Co.			
Atlas Apple Spray S.F.D.			
Ferbam Dichlone Sulfur	9.50 3.00 71.00	3.53	Passed
Ferbam Dichlone Sulfur	9.50 3.00 71.00	9.48 3.26 69.82	Passed

Manufacturers and Brands (1997)	Guaranteed Per Cent	Found Per Cent	Decisions
Atlas Apple Spray S.F.D. (Continued)			
Ferbam Dichlone Sulfur	9.50 3.00 71.00	8.68 2.25 73.69	Deficient
Ferbam	9.50 3.00 71.00	8.88 2.93 71.76	Deficient
Ferbam Dichlone Sulfur	9.50 3.00 71.00	8.01 3.97 68.57	Deficient
Corona Chemical Div. Pittsburgh Plate Glass Co.			
Corona Micronized Phybam-S Ferbam Dichlone Sulfur	9.50 3.00 71.00	11.05 2.70 65.55	Deficient
Ferbam Dichlone Sulfur	9.50 3.00 71.00	8.49 1.91 71.00	Deficient
FERBAM-PARATHION			
Farmers Cooperative Exchange, Inc.		and the latest	
FCX 11.4% Ferbam-1% Parathion Dust			
Ferbam Parathion	11.40	9.73 0.74	Deficient
FLUORINE COMPOUNDS SODIUM FLUORIDE			
Fairfax Biological Laboratory			
Roach Doom Sodium fluoride	90.00	91.50	Passed
Ralson Puring Co.			
Purina Lice Powder Sodium fluoride	35.00	37.58	Passed
SODIUM FLUORIDE-PIPERONYL BUTOX.DE-PYRETHRINS			
Rigo Manufacturing Co.			ilas Agricultu
Kill-Ko Roach Powder Sodium fluoride Piperonyl butoxide Pyrethrins	58.00 1.50 0.15	55.14 1.38 0.20	Passed
Sodium fluoride	58.00 1.50 0.15	55.34 1.35 0.198	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
SODIUM FLUORIDE-PYRETHRINS			
Master Products Co.			
Roach Buster			
Sodium fluoride Pyrethrins	76.00 0.10	76.19 0.12	Passed
Sodium fluoride	76.00 0.10	72.76 0.10	Passed
Sodium fluoride Pyrethrins	76.00 0.10	59.59 0.14	Deficient
SODIUM FLUORIDE-SODIUM FLUOSILICATE-DDT			
Nott Manufacturing Company, Inc.			
Notts Roach Powder			
Sodium fluoride Sodium fluosilicate DDT Theoretical fluoride	85.00 0.50 10.00 38.75	10.14 40 <b>.</b> 25	Not Registered
SODIUM FLUOSOLICATE-CHLORDANE			
Shepards Chemical Works			
Shepard's Roach Killer			
Sodium fluosilicate Chlordane	58.00 2.00	65.15 0.87	Deficient
SODIUM FLUOSOLICATE- ROTENONE-SULFUR			
Carbola Chemical Company, Inc.			
Carbola Louse Killer			
Sodium fluosilicate Rotenone Sulfur	0.50 15.00		
FUMARIN			Unice Haptoch
Farmers Cooperative Exchange, Inc.			
FCX Rat and Mouse Ready-to-Use Pellets	1000		
Fumarin do do do	0.025 0.025 0.025 0.025	0.027 0.022 0.023 0.018	Passed Passed Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Rigo Manufacturing Co.			
Kill-Ko Rat Bait			
Fumarin	0.025	0.029	Passed
HEPTACHLOR			
Farmers Cooperative Exchange, Inc.			
Unico 2½% Heptachlor Granular			
Heptachlor (Technical)	3.47	4.03	Passed
do	3.47 3.47	3.89 5.02	Passed Passed
do	3.47	4.79	Passed
Olin Mathieson Chemical Corp.			
Mathieson Heptachlor 2½% Granular			
Heptachlor (Technical)	3.47	3.70	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 2½% Heptachlor Granules			
Heptachlor (Technical)	3.47	3.83	Passed
do	3.47 3.47	3.66 3.69	Passed Passed
do	3.47	3.89	Passed
do	3.47	3.89	Passed
do	3.47 3.47	3.89 3.97	Passed Passed
Swift and Co.			
Agricultural Chemical Div.		h fdiler	
Swift's Gold Bear Heptachlor A 2.5 G			
Heptachlor (Technical)	3.47	3.94	Passed
Swift's Gold Bear Heptachlor A-2-E	20.00	20.74	sopiu
Heptachlor (Technical)	30.90	30.74	Passed
Taylor Chemical Co.			
Superkill 2½% Heptachlor (Granular)  Heptachlor (Technical)	3.47	4.21	Passed
0.50 0.32	3.47	4.21	russeu
United Cooperatives, Inc. Registered by Farmers Cooperative Exchange	, Inc.)		
Unico Heptachlor Transplanter Solution			
Heptachlor (Technical)	32.30 32.30	33.91 32.32	Passed Passed
Woolfolk Chemical Works, Ltd.	es halfatur	how the same	A boo to 2 5
0.028 0.027 \$10.04			
Security Brand 2½% Heptachlor Granulated Heptachlor (Technical)	2 47	2.50	Description
do	3.47 3.47	3.50 3.61	Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
MALATHION			
Acme Quality Paints, Inc.			
Acme 50% Malathion Spray			
Malathion do	50.00 50.00	55.78 56.32	Passed Passed
Allied Chemical Corp. General Chemical Div.			
Orchard Brand 50% Malathion Emulsifiable			
Malathion	50.00	50.58	Passed
California Chemical Company-Ortho Div.			
Ortho Malathion 5 Dust			
Malathion	5.00	4.80	Passed
Ortho Malathion 50 Spray  Malathion	50.00	50.61	Passed
Ortho Malathion 5 Emulsive			
Malathion	55.00	54.12	Passed
California Spray-Chemical Corp. Now: California Chemical Company-Ortho	Div.)		
Ortho Grain Protectant			
Malathion	1.00	1.73	Excessive Active
Ortho Malathion Garden Dust			Ingredient
Malathion	5.00	5.66	Passed
Ortho Malathion 50 Spray  Malathion	50.00	51.18	Passed
Corona Chemical Div.			
Pittsburgh Plate Glass Co. Corona Malathion CM-285-25% Wettable	notchame.	erco nout	
Malathion Malathion Malathion	25.00	24.92	Passed
Daly-Herring Co.			
Dee Aitch 4% Malathion Dust			
Malathion	4.00	3.88	Passed
Farmers Cooperative Exchange, Inc.			
FCX 4% Malathion Dust			
Malathion do	4.00	3.59	Deficient
do	4.00	3.82 3.88	Passed Passed
dodo	4.00 4.00	4.35 3.81	Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
FCX 5% Malathion Dust			
Malathion	5.00	4.75	Passed
FCX Cattle and Poultry Dust			
Malathion	5.00	2.71	Deficient
FCX Malathion Emulsifiable Concentrate			Maiathian
Malathion do	55.20 55.20	56.63 57.12	Passed Passed
do	55.20	55.34	Passed
Florida Agricultural Supply Co.	thion Emulsifi		
Fasco Fly Flakes			
Malathion	1.00	1.03	Passed
GurMiCo Chemicals, Inc.			
GurMiCo 4% Malathion Dust			
Malathion		3.94	Passed
do 2229 14.02 12.00	4.00	3.53	Deficient Misbranded
Hopkins Agricultural Chemical Co.			
Hopkins Malathion Dust			
Malathion	4.00	3.15	Deficient
			Not Registered
Maxwell Insecticide Company, Inc.			
Maxwell 4% Malathion Dust			
Malathion	4.00	3.92 3.87	Passed Passed
do	4.00	3.91	Passed
do	4.00	3.43 3.62	Deficient Deficient
do	4.00	3.75	Deficient
do	4.00	3.67	Deficient
Maxwell Malathion 55% Emulsion		e Glass Co.	ittsburgh Plan
Malathion	55.00	57.06	Passed
Olin Mathieson Chemical Corp.			
Mathieson Malathion 4% Dust  Malathion	4.00	3.14	Deficient
Mathieson Malathion 5 lb. Emulsifiable Lic	uid		
Malathion	57.00	57.17	Passed
W. R. Peele Company, Inc.			
Pelco 4% Malathion Dust			
Malathion	4.00	3.33	Deficient
Pelco Malathion Emulsion E-5			
Malathion	55.00	56.66	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Ralston Purina Co.			
Purina Malathion Spray			
Malathion do		55.42 58.55	Passed Passed
Rigo Manufacturing Co.			
Kill-Ko Flea Powder			
Malathion	4.00	3.54	Deficient
Kill-Ko Malathion 5% Dust  Malathion	5.00	4.31	
Kill-Ko Malathion 50% Emulsifiable Con-		min2 based to	O seed to be seed to
Malathion		50.22	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 4% Malathion Dust			
Malathion	4.00	4.22	Passed
do		3.87 3.95	Passed Passed
SA-50 Brand 5% Malathion Dust	4.00	3.73	i usseu
Malathion	5.00	5.15	Passed
do		5.39	Passed
Swift and Co. Agricultural Chemical Div.			
Swift's Gold Bear Malathion-G5E			
Malathion	55.00	51.88	Deficient
Taylor Chemical Co.			
Superkill 5% Malathion Dust			
Malathion	5.00	4.73	Deficient
Superkill 50% Malathion Spray			
Malathion	50.00	51.49	Passed
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchai	nge, Inc.)		
Unico Malathion Spray Powder			
Malathiondo	25.00 25.00	24.45 23.95	Passed Passed
Woolfolk Chemical Works, Ltd.			
Managara con con			
Security Brand 5% Malathion Dust  Malathion	F 00		
do		5.05 5. <b>2</b> 7	Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
MALATHION-CAPTAN-METHOXYCHLOR			
Acme Quality Paints, Inc.			
Acme Fruit Tree Spray			
Malathion Captan Methoxychlor Theoretical chlorine	6.00 12.00 12.00 7.90	7.26 8.38	Passed
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho I	Div.)		
Ortho Home Orchard Spray			
Malathion Captan Methoxychlor Theoretical chlorine	7.50 15.00 15.00 9.87	8.10	Passed
	7.07	10.33	
Ortho Dog Powder  Malathion Captan Methoxychlor	2.00 5.00 2.00	2.13	Possed
Theoretical chlorine	2.38	2.41	
MALATHION-CAPTAN-SULFUR		3.4- 1	
Union Carbide Consumer Products Co. Division of Union Carbide Corp.			
Eveready Rose Dust			
Malathion Captan Sulfur  MALATHION-DIELDRIN-PIPERONYL BUTOX.DE-PYRETHRINS	5.00 7.50 15.00	4.10 6.38 15.10	Deficient
Boyle-Midway, Inc.			
Black Flag Guaranteed Bug Killer			
Malathion Dieldrin Piperonyl butoxide Pyrethrins California Chemical Company-Ortho Div.	1.00 0.30 0.10 0.04	1.07 0.37 0.114 0.047	Passed
Ortho Ant and Roach Bomb			
Malathion Dieldrin Piperonyl butoxide Pyrethrins	2.00 0.30 0.12 0.05	2.02 0.30 0.150 0.062	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
California Spray-Chemical Carp. (Naw: California Chemical Company-Ortha	Div.)		
Ortho Ant and Roach Bomb			
Malathion Dieldrin Piperonyl butoxide Pyrethrins	2.00 0.30 0.12 0.05	1.70 0.31 0.11 0.08	Deficient
Malathion Dieldrin Piperonyl butoxide Pyrethrins	2.00 0.30 0.12 0.15	1.92 0.36 0.17 0.08	Passed
MALATHION-ENDRIN			
Swift and Co. Agricultural Chemical Div.			
Super Guard 258E			
Malathion Endrin	28.40 9.10	29.88 9.80	Passed
MALATHION-METHOXYCHLOR			
Agricultural Specialties			
M and M Dairy Cattle Dust			
Malathion Methoxychlor	4.00 5.00	4.41 4.89	Passed
Farmers Caoperative Exchange, Inc.			
FCX Bean Dust			
Malathion Methoxychlor	3.00 3.00	2.86 3.22	Passed
United Cooperatives, Inc. (Registered by Farmers Coaperative Exchan	ge, Inc.)		
Unico 1* Estate Insecticide			
Malathion Methoxychlor	16.00 16.00	10.02 17.61	Deficient
MALATHION-METHOXYCHLOR- SULFUR-ZINEB			
Sears, Raebuck and Co.			
Cross Country Three Way Garden Dust			
Malathion Methoxychlor Sulfur Zineb	4.00 5.00 5.00 5.00	2.87 4.60 6.07 5.78	Deficient Not Registered

Mo

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
MALATHION-PHENOLS			
Carbola Chemical Company, Inc.			
Carbola, The Disinfecting White Paint			
Malathion Phenols	1.00	0.53 Present	Passed
MALATHION-PINE OIL-ROTENONE			
Ralston Purina Co.			
Purina Back Scratch			
Malathion Pine oil Rotenone	28.50 8.50 0.71	29.37 Present Present	Passed
MALATHION-PIPERONYL BUTOXIDE-PYRETHRINS			
Rigo Manufacturing Co.			
Kill-Ko Quick Kill Insect Bomb			
Malathion Piperonyl butoxide Pyrethrins	2.00 0.125 0.05	2.39 0.12 0.08	Passed
MALATHION-PIPERONYL BUTOXIDE-PY STROBANE-THANITE	RETHRINS-		
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)	days pello	
Ortho Household Insect Bomb			
Malathion Piperonyl butoxide Pyrethrins Strobane Thanite	1.00 0.20 0.025 1.00 1.00	1.21 0.13 0.06 1.28 Present	Passed
Malathion Piperonyl butoxide Pyrethrins Strobane Thanite	1.00 0.20 0.025 1.00 1.00	0.67 0.13 0.05 1.20 Present	Passed
MALATHION-SULFUR			
Farmers Cooperative Exchange, Inc.			
FCX Special Custom Blend 4% Malathion	Dust Plus Sulf	ur Dust	
Malathion	4.00 25.00	4.79 24.80	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 4% Malathion Dust with 25%	Sulfur		
Malathion	4.00 25.00	3.64 26.30	Deficient
Malathion	4.00 25.00	3.82 27.47	Passed
SA-50 Brand 4% Malathion-70% Sulfur-1	% Mangan	ese Pole B	ean Dust
Malathion Sulfur	4.00 70.00	4.35 73.49	Passed
MANEB			
E. I. du Pont de Nemours and Co.			
Du Pont Manzate			
Maneb	80.00	81.27	Passed
Southern Agricultural Insecticides, Inc.			
SA-50 Brand Manzate Dust			
Maneb do	5.60 5.60	5.66 5.99	Passed Passed
do	5.60	5.77	Passed
do	5.60 5.60	5.76 5.72	Passed Passed
do	5.60	5.71	Passed
do	5.60	6.19	Passed
do	5.60	6.12	Passed
MANEB-PARATHION			
Farmers Cooperative Exchange, Inc.			
FCX 1.4% Maneb 1% Parathion			
Maneb Parathion	1.40	1.04 0.88	Deficient
METHOXYCHLOR			
E. I. du Pont de Nemours and Co.			
Du Pont Dairy Cattle Insecticide			
Methoxychlor do	50.00 50.00	51.43 52.50	Passed Passed
Du Pont 50% Technical Methoxychlor Insect	ticide		
Methoxychlor	50.00	51.78	Passed
Geigy Agricultural Chemicals			
Geigy Methoxychlor "50"			
Methoxychlor	50.00	50.35	Passed
Geigy Methoxychlor "50" 50% Wettable Po			
Methoxychlor	50.00	47.86	Passed

Guaranteed Per Cent	Found Per Cent	Decisions
10.00	10.50 10.29	Passed Passed
10.00	11.07	Passed
5.00	5.14	Passed
TE		
1.26	1.59 Present	Passed
1.00	Present	
1		
5.00		Passed
1.75	2.18	M SEAT XC
2.94	2.88	
nge, Inc.)		
5.00 7.50		Passed
1.00	Present	A NORTH THE
4.17	4.20	
5.00		Passed
7.50 1.00	Present	
25.00 4.17	26.85	
	10.00 10.00 10.00 10.00 5.00 5.00 4.00 1.75 2.94 1.00 25.00 4.17 5.00 7.50 1.00 25.00 4.17	10.00 10.50 10.00 10.29  10.00 11.07  5.00 5.14  TE  1.26 1.59 0.113 Present 1.00 Present 2.94 2.88  nge, Inc.)  5.00 7.50 1.00 Present 25.00 24.84 4.17 4.20 5.00 7.50 1.00 Present 25.00 26.85

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
METHOXYCHLOR-FERBAM- ROTENONE-SULFUR			
The Sherwin-Williams Co. (Registered by Acme Quality Paints, Inc.)			
Sherwin-Williams Flower Dust			
Methoxychlor Ferbam Rotenone Sulfur	5.00 7.60 0.75 26.20	5.50 7.82 Present 27.32	Passed
Methoxychlor Ferbam Rotenone Sulfur	5.00 7.60 0.75 26.20	5.53 7.35 Present 27.88	Passed
METHOXYCHLOR-FERBAM- ROTENONE-ZIRAM			
Acme Quality Paints, Inc.			
Acme All Round Dust			
Methoxychlor Ferbam Rotenone Ziram Theoretical carbon disulfide	5.00 4.00 0.75 4.00 4.18	5.07 Present 4.19	Passed
METHOXYCHLOR-FERBAM-SULFUR			
E. I. du Pont de Nemours and Co.			
Du Pont Fruit Tree Spray			
Methoxychlor Ferbam Sulfur	12.50 15.20 24.20	13.37 16.01 24.32	Passed
Methoxychlor Ferbam Sulfur	12.50 15.20 24.20	13.12 15.20 25.29	Passed
The Sherwin-Williams Co. (Registered by Acme Quality Paints, Inc.)			
Sherwin-Williams Fruit Tree Spray			
Methoxychlor Ferbam Sulfur	12.50 15.20 24.20	12.94 15.88 25.48	Passed
Methoxychlor Ferbam Sulfur	12.50 15.20 24.20	12.80 15.16 24.20	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decision
METHOXYCHLOR-HEXACHLOROPHENE- BUTOXIDE-PYRETHRINS			
The R. T. French Co.			
Shoo Flea by French's			
Methoxychlor Hexachlorophene Piperonyl butoxide Pyrethrins Theoretical chlorine	0.50 0.10 0.48 0.06 0.20	0.45 0.06 0.23	Passed
Methoxychlor Hexachlorophene Piperonyl butoxide Pyrethrins Theoretical chlorine	0.50 0.10 0.48 0.06 0.20	0.47 0.06 0.25	Passed
Methoxychlor Hexachlorophene Piperonyl butoxide Pyrethrins Theoretical chlorine	0.50 0.10 0.48 0.06 0.20	0.50 0.06 0.24	Passed
METHOXYCHLOR-PIPERONYL BUTOXIDE-PYRETHRINS California Spray-Chemical Corp. (Now: California Chemical Company-Ortho	Div.)		
Ortho Home and Garden Insect Bomb			
Methoxychlor	2.00 0.50 0.10	2.32 0.74 0.12	Passed
Gulf Oil Corp.			
Gulf Spray-Aerosol			
Methoxychlor Piperonyl butoxide Pyrethrins	2.00 1.00 0.25	2.12 1.02 0.27	Passed
Methoxychlor	2.00 1.00 0.25	2.08 1.19 0.30	Passed
Hot Shot Quality Products, Inc.			
Hot Shot House and Garden Aerosol Spray	Bug Killer		
Methoxychlor Piperonyl butoxide Pyrethrins	2.00 0.30 0.20	2.22 0.24 0.20	Passed
Methoxychlor Piperonyl butoxide Pyrethrins	2.00 0.30 0.20	2.05 0.30 0.24	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Rigo Manufacturing Co.			
Kill-Ko Insect Bomb for House and Garden			
Methoxychlor Piperonyl butoxide Pyrethrins	2.00 0.50 0.10	2.17 0.60 0.14	Passed
METHOXYCHLOR-ROTENONE			
Sears, Roebuck and Co.			
Cross Country Vegetable Garden Dust			
Methoxychlor Rotenone	5.00 1.25	5.75 0.94	Passed
METHOXYCHLOR-ROTENONE-ZINEB			
The Sherwin-Williams Co. (Registered by Acme Quality Paints, Inc.)			
Sherwin-Williams Vegetable and Tomato Du	istalia Baralun		
Methoxychlor Rotenone Zineb	5.00 0.75 5.20	5.46 0.54 5.18	Passed
METHYL PARATHION			
California Chemical Company-Ortho Div.			
Ortho Methyl Parathion 2 Emulsive			
Methyl parathion	24.00	24.30	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand 21/2 Methyl Parathion Dust			
Methyl parathion	2.50	2.38	Passed
NAPHTHALENE			
Click Chemical Corp.			
Click Moth Balls			
Naphthalene	100.00	99.80	Passed
Koppers Company, Inc.			
Koppers Moth Flakes			
Manhahalaus	100.00	98.83	Passed
Naphthalene			

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
The Mabex Co.			
Woolworth's Moth Flakes Naphthalene	100.00	98.50	Passed
Stephenson Chemical Company, Inc.			
Stephenson 10% Nemagon Granules Nemagon	10.00	9.57	Misbranded
Taylor Chemical Co.			
Superkill 30% Granulated Nemagon  Nemagon  do  do	30.00 30.00 30.00	28.51 29.79 28.11	Passed Passed Deficient
Woolfolk Chemical Works, Ltd.			
Security Brand 10% Granulated Nemagon Nemagon	10.00	9.36	Deficient
NICOTINE			
Acme Quality Paints, Inc.			
Acme Emo-Nik Nicotine alkaloid	1.50	1.75	Passed
Black Leaf Products Co.			
Black Leaf 40 Garden Spray Nicotine alkaloid	40.00	39.00	Passed
PARATHION-SULFUR			
Taylor Chemical Co.			
Superkill Peach Spray #2 Parathion Sulfur	3.70 75.00	3.98 76.23	Passed
PERTHANE			
S. C. Johnson and Sons, Inc.			
Raid Moth Proofer			
Perthane do	5.00 5.00	4.84 5.19	Passed Misbranded

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mike, Inc.			
101 Brand Cabbage Dust No. 6			
Perthane	6.00	6.47	Passed
PERTHANE-PIPERONYL BUTOXIDE-PYRETHRINS			
Ralston Purina Co.			
Purina Home Aero-Spray			
Perthane Piperonyl butoxide Pyrethrins	0.80	2.66 0.75 0.24	Passed
Perthane Piperonyl butoxide Pyrethrins	0.80	2.50 0.96 0.22	Passed
Perthane Piperonyl butoxide Pyrethrins	. 0.80	2.58 0.70 0.24	Passed
Registered by Farmers Cooperative Exchaumico Household Aerosol	inge, Inc.)		
Perthane Piperonyl butoxide Pyrethrins	0.60	3.65 0.53 0.30	Passed
Perthane Piperonyl butoxide Pyrethrins	0.60	3.08 0.53 0.24	Passed
PERTHANE-PYRETHRINS			
Ralston Purina Co.			
Purina Home Spray			
Perthane Pyrethrins	1.00	1.17 0.06	Passed
PHOSDRIN			
W. R. Grace and Co. Davison Chemical Div.			
Naco 2% Phosdrin Dust			
Phosdrin	2.00	2.18	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Southern Agricultural Insecticides, Inc.			
SA-50 Brand 2% Phosdrin Insecticide Dust			
Phosdrin do do do	2.00 2.00 2.00	2.02 1.90 2.09	Passed Passed Passed
PHOSPHORUS			
Common Sense Manufacturing Company, In	с.		
Common Sense Cockroach Preparation			
Phosphorus	2.00	2.12	Passed
Common Sense Rat Preparation			
Phosphorus	2.00	1.92	Passed
The Master Products Co.			
Fireball Rat Paste Phosphorus	2.00	3.09	Passed
PIVAL Cool page			
CessCo, Inc. (Registered by Chemical and Equipment Sal	es and Service	Co.)	
Bait Tox Ready-Mixed Rat Bait		ubbolus	
Pival	0.025	0.025	Passed
Ralston Purina Co.			
Purina Rat-Kill Pivalyn do	0.0275 0.0275	0.0250 0.0278	Passed Passed
Purina Rat Control Water Soluble			
Pivalyn	0.14	0.17	Passed
PYRETHRINS			
Real-Kill Products Division of Cook Chemical Co.			
Real-Kill Insect Bomb			
Pyrethrins	0.23	0.28	Passed
Real-Kill Insect Spray			
Pyrethrins	0.095	0.12	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
PYRETHRINS-DIAZINON-N-OCTYL		ENE	nourseve
DICARBOXIMIDE—PIPERONYL	BUTOXIDE		
Ralston Purina Co.			
Purina Roach Bomb			
Pyrethrins Diazinon N-octyl bicycloheptene	0.05 0.50	0.072	Passed
dicarboximide	0.17 0.10	0.10	
Theoretical nitrogen	0.055	0.076	
Pyrethrins Diazinon N-octyl bicycloheptene	0.05 0.50	0.06	Passed
dicarboximide	0.17	0.07	
Piperonyl butoxide	0.10 0.055	0.07 0.123	
aylor Chemical Co.			
uperkill New Roach and Ant Killer			
Pyrethrins Diazinon N-octyl bicycloheptene	0.05 0.50	0.06	Passed
dicarboximide	0.166 0.100	0.070	
Theoretical nitrogen	0.055		
PYRETHRINS-DIAZINON- PIPERONYL BUTOXIDE			
Maxwell Insecticide Company, Inc.			
Maxwell Household Insect Spray			
Pyrethrins Diazinon Piperonyl butoxide	0.052 0.500 0.261	0.065 0.970 0.260	Passed
PYRETHRINS-LETHANE 384			
eal-Kill Products ivision of Cook Chemical Co.			
eal-Kill Fly and Mosquito Killer Bomb			
Pyrethrins Lethane 384	0.20 0.50	0.27 Present	Passed
eal-Kill Indoor-Outdoor Bomb	0.12		
Pyrethrins Lethane 384	0.20 0.50	0.32 Present	Passed
Pyrethrins Lethane 384	0.20 0.50	0.21 Present	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
PYRETHRINS-LETHANE 384-PINE OIL-PIPERONYL BUTOXIDE			
Ralston Purina Co.			
Purina Dairy Spray			
Pyrethrins Lethane 384 Pine oil Piperonyl butoxide	0.03 1.00 2.00 0.24	0.05 Present Present 0.12	Passed
PYRETHRINS-LETHANE 384-PIPERONYL BUTOXIDE			
Gulf Oil Corp.			
Gulf Livestock Spray			
Pyrethrins Lethane 384 Piperonyl butoxide	0.05 0.60 0.25	0.07 Present 0.23	Passed
PYRETHRINS-PIPERONYL BUTOXIDE			
Agricultural Specialties			
Starbar Redi-Foam Face Fly Bomb			
Pyrethrins	0.10 1.00	0.10 0.95	Passed
Anchor Serum Co.			
Anchor Dairy Spray			
Pyrethrins	0.025 0.065	0.04 0.06	Not Registered
The Great Atlantic and Pacific Tea Compa	ny, Inc.		
Bright Sail Aerosol Insect Killer			
Pyrethrins Piperonyl butoxide	0.30 0.60	0.22 0.61	Passed
Pyrethrins Piperonyl butoxide	0.30 0.60	0.29 0.69	Passed
Colonial Stores, Inc.			
New 3-D Non-Toxic Insect Killer			
Pyrethrins Piperonyl butoxide	0.30 0.60	0.29 0.69	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
The Dill Company, Inc.			
Dill's Spray Kills Moth and Mosquito			
Pyrethrins	0.031 0.251	0.048 0.233	Passed
Pyrethrins Piperonyl butoxide	0.031 0.251	0.050 0.220	Passed
Douglas Chemical Co.			
Douglas Special Mill Spray			
Pyrethrins Piperonyl butoxide	0.14 1.39	0.16 1.38	Passed
Hot Shot Quality Products, Inc.			
Hot Shot Fly and Mosquito, Insect Killer	9.29	abbyonu	lenousis.
Pyrethrins Piperonyl butoxide	0.25 0.375	0.26 0.43	Passed
S. C. Johnson and Son, Inc.			
Raid Insect Spray		2000	Pyretheim
Pyrethrins Piperonyl butoxide	0.075 0.150	0.10 0.14	Passed
Pyrethrins Piperonyl butoxide	0.075 0.150	0.09	Passed
Raid House and Garden Bug Killer	ay-Orma Div.	nemači lasi	centra Chem
Pyrethrins Piperonyl butoxide	0.25 0.80	0.26 0.76	Passed
Pyrethrins	0.25 0.80	0.30 0.78	Passed
Pyrethrins Piperonyl butoxide	0.25 0.80	0.30 0.77	Passed
Pyrethrins Piperonyl butoxide	0.25 0.80	0.26 0.76	Passed
Polk-Miller Products Corp.			
Sergeant's Skip-Flea Shampoo for Dogs			
Pyrethrins	0.05 0.50	Present 0.51	
Ralston Purina Co.			
Purina Face and Horsefly Insecticide			
Pyrethrins Piperonyl butoxide	0.06 0.12	0.08 0.091	Passed
Purina Face and Horsefly Bomb			
Pyrethrins Piperonyl butoxide	0.18 0.36	0.24 0.37	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Purina Dairy Oiler Insecticide Concentrate		ny, Inc.	e Dill Compai
Pyrethrins Piperonyl butoxide	0.50 1.00	0.98	Passed
Rigo Manufacturing Co.			
Kill-Ko Kattle Spray			
Pyrethrins Piperonyl butoxide	0.03 0.30	0.054 0.32	Passed
United Cooperatives, Inc. (Registered by Farmers Coperative Exchange	e, Inc.)		
Unico Livestock and Barn Fogging Spray			
Pyrethrins Piperonyl butoxide	0.10 1.00	0.12 0.94	Passed
Whitmoyer Laboratories, Inc.			
Whitmoyer New, Improved Whitspray Dairy Barn and Livestock Spray	Cattle,		
Pyrethrins Piperonyl butoxide	0.05 0.10	0.17	Passed
PYRETHRINS-PIPERONYL BUTOXIDE-PINE OIL			
California Chemical Company-Ortho Div.			
Ortho Dairy and Stock Fly Spray			
Pyrethrins Piperonyl butoxide Pine oil	0.03 0.25 0.025	0.05 0.22 Present	Misbranded
Hess and Clark Division of Richardson-Merrell, Inc.			
Hess and Clark Hesspray For Livestock			
Pyrethrins Piperonyl butoxide Pine oil	0.03 0.30 0.56	0.06 0.25 Present	Passed
PYRETHRINS-PIPERONYL BUTOXIDE-RONNEL-STROBANE-THANITE			
California Chemical Company-Ortho Div.			
Ortho Mosquito and Fly Bomb			
Pyrethrins Piperonyl butoxide Ronnel	0.025 0.20 0.40	0.08 0.17	Passed
Strobane Thanite Theoretical chlorine	1.00 1.00 0.79	Present 0.83	Pyrathilis Piperanyl i

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Total Savarrilative alarmative			
PYRETHRINS-PIPERONYL BUTOXIDE-STROBANE			
Phoenika SBO 00,1			
Colgate-Palmolive Co.			
Kan-Kil Aerosol Fly and Mosquito Killer	mical Compa	may bab si	
Pyrethrins Piperonyl butoxide Strobane	0.20 0.50 2.00	0.18 0.49 1.89	Deficient
Hess and Clark Division of Richardson-Merrell, Inc.			
Hess and Clark Hess Bomb			
Pyrethrins Piperonyl butoxide Strobane	0.20 0.80 2.00	0.26 1.06 1.90	Passed
RONNEL			
Acme Quality Paints, Inc.			
Acme R.N.L. Roach Blaster			
Ronnel do	2.00 2.00	2.52 2.43	Passed Passed
ROTENONE			
Black Leaf Products Co.			
Black Leaf 1 % Rotenone Garden Dust			
Rotenone	1.00	0.96	Passed
California Spray-Chemical Corp. (Now: California Chemical Company-Ortho Di			Itopial Haward
1.00 0.82 Enced a a			
Ortho Cattle Grub Spray or Dust  Rotenone	5.00	5.05	Passed
Cape Fear Chemicals, Inc.			
Tiger Brand 1 % Rotenone Dust			
Rotenone	1.00	1.29	Passed
Carolina Chemical Corp.			
Rotenone 1% Dust			
Rotenone	1.00	0.68	Deficient
do do	1.00	0.80	Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Carolina Chemicals, Inc.			
Flight Brand Bean Beetle Dust			
Rotenone	1.00	0.82	Passed
Carter Insecticide and Chemical Company,	Inc.		
Carolina Brand 1 % Rotenone Dust			
Rotenone do	1.00 1.00	0.45 0.97	Deficient Passed
Farmers Cooperative Exchange, Inc.			
FCX Rotox "100"			
Rotenone	1.00	0.92	Passed
do	1.00 1.00	0.90 0.92	Passed Passed
	1.00	0.72	nasseu
FCX 5% Rotenone Wettable Powder Rotenone	5.00	4.40	Deficient
restance	3.00	JEH:HER	Dencient
GurMiCo Chemicals, Inc.	0.05		
GurMiCo 1 % Rotenone Dust			
Rotenonedo	1.00	0.49 1.00	Deficient Passed
Hess and Clark Division of Richardson-Merrell, Inc.			
Hess and Clark Powdered Louse Killer			
Rotenone	0.50	0.49 0.54	Passed Passed
do	0.50	0.46	Passed
Maxwell Insecticide Company, Inc.			lifornia Spray
Maxwell 1% Rotenone Dust			
Rotenone	1.00	0.82	Passed
One-Spot Co.			
One-Spot Flea Killer			
Rotenone	1.00	1.07	Passed
W. R. Peele Company, Inc.			
Pelco 1 % Rotenone Dust			
Rotenone	1.00	0.80	Passed
Planters Chemical Corp.			
Planters 1% Rotenone Dust			
Rotenone	1.00	1.03	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Taylor Chemical Co.			
Superkill 1% Rotenone Dust For Beans			
Rotenone do	1.00 1.00 1.00	0.75 0.78 0.80	Deficient Deficient Passed
Woolfolk Chemical Works, Ltd.			
Security Brand Mexide 1% Rotenone Dust Rotenone	1.00	0.73 0.83	Deficient Passed
do do	1.00	1.01 0.82	Passed Passed
ROTENONE-DICHLOROPHENE-HEXACHLO	ROPHENE		
The Hilo Co. Division of Natcon Chemical Company, Inc.			
Hilo Flea and Fungus Powder			
Rotenone Dichlorophene Hexachlorophene	1.20 0.50 0.50	1.20	Passed
Theroetical chlorine	0.39	0.38	
ROTENONE-NAPHTHALENE-SULFUR			
William Cooper and Nephews, Inc.			
Cooper Dri-Kill			
Rotenone Naphthalene	0.10 4.00	Present 3.86	Passed
Sulfur	10.00	10.85	
ROTENONE-PINE OIL-PIPERONYL BUTOXIDE-PYRETHRINS			
Chemical and Equipment Sales and Service C	o.		
Cess Co Safe Guard Dairy and Livestock Inse	cticide and R	epellent	
Rotenone Pine oil Piperonyl butoxide Pyrethrins	0.10 1.00 0.10 0.04	Present Present 0.14 0.06	Passed
ROTENONE-PIPERONYL BUTOXIDE-PYRETHRINS			
The Hilo Co. Division of Natcon Chemical Company, Inc.			
Hilo Dog Spray			
Rotenone Piperonyl butoxide Pyrethrins	0.128 0.256 0.025	Present 0.308 0.028	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
ROTENONE-PYRETHRINS-SULFUR			
Southern Agricultural Insecticide, Inc.			
SA-50 Brand Mexican Bean Beetle Contro	ol		
Rotenone Pyrethrins Sulfur	0.04	0.72 0.10 19.08	Passed
Rotenone Pyrethrins Sulfur	0.50 0.08 18.00	0.42 0.12 17.53	Passed
SA-50 Brand SA-100 for Mexican Bean B	leetle Control		
Rotenone Pyrethrins Sulfur	1.00 0.08 18.00	1.03 0.15 18.30	Passed
Rotenone Pyrethrins Sulfur	1.00 0.08 18.00	0.85 0.10 19.25	Passed
ROTENONE-SULFUR			
Daly-Herring Co.			
Dee Aitch Rotenone Sulfur Dust Rotenone Sulfur	1.00 15.00	0.98 14.60	Passed
Rotenone	1.00 15.00	0.90 14.56	Passed
Farmers Cooperative Exchange, Inc.			
FCX Cattle Grub and Louse Powder			
Rotenone	1.60 45.00	1.21 41.86	Deficient
Graham Chemical Company, Inc.			
Graham's Red Star Agricultural Rotenone I		Equipment	bno looimad
Rotenone	1.00 15.00	1.06 15.86	Passed
Rotenone	1.00 15.00	1.09 14.39	Passed
Rotenone	1.00 15.00	1.03 14.98	Passed
Graham's Red Star Agricultural Vegetable		OXIDE-PYR	TUB
Rotenone	1.00 15.00	1.14	Passed
Rotenone	1.00 15.00	1.16 16.19	Passed
Rotenone	1.00 15.00	1.06 16.70	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Graham's Red Star Agricultural Vegetable	Dust (Continu	ed)	
Rotenone	1.00 15.00	1.11	Passed
Rotenone	1.00 15.00	1.05 15.95	Passed
J. M. Harris and Company, Inc.			
Blue Dragon Dust			
Rotenone Sulfur	0.75 10.00	0.72 9.79	Passed
Rotenone	0.75 10.00	0.61 10.33	Passed
Rotenone	0.75 10.00	0.68 9.92	Passed
Rotenone	0.75 10.00	0.72 10.36	Passed
Sam Houston Co.			
Houston's Rotenone Sulfur-Talc Mix	0.75		Carolina Chum
Rotenone Sulfur	0.75	0.55 9.85	Passed
Maxwell Insecticide Company, Inc.			
Maxwell 1% Rotenone Dust	emical Campan	do and Ch	ipitaeanl servoi
Rotenone	1.00 15.00	0.82 15.23	Passed
Rotenone Sulfur	1.00 15.00	0.98 14.95	Passed
Rotenone	1.00 15.00	1.03	Passed
Rotenone Sulfur	1.00 15.00	0.80 14.35	Passed
Rotenone Sulfur	1.00 15.00	1.00 15.24	Passed
Maxwell Cattle Grub and Louse Powder			
Rotenone	1.50 65.00	1.80 <b>63.39</b>	Passed
W. R. Peele Company, Inc.			
Pelco 1% Rotenone Dust			
Rotenone Sulfur	1.00 15.00	1.00	Deficient
Rotenone	1.00 15.00	1.04 14.93	Passed
Ralston Purina Co.			
Purina Lice and Grub Killer	to Mr. ame		
Rotenone Sulfur	1.67 50.00	1.23 50.00	Deficient

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Wyatt Quarles Seed Co.			
Wyatt's 1% Rotenone Dust			
Rotenone	1.00 15.00	0.88 14.61	Passed
Rotenone	1.00 15.00	0.94 15.19	Passed
Rotenone Sulfur	1.00 15.00	0.99 14.54	Passed
Rotenone	1.00 15.00	0.91 14.38	Passed
Rotenone	1.00 15.00	0.84 14.72	Passed
SABADILLA			
Carolina Chemicals, Inc.			
Flight Brand 20% Ground Sabadilla Dust			
Sabadilla alkaloids	0.80	0.79	Passed
Carter Insecticide and Chemical Company,	Inc.		
Carolina Brand 20% Sabadilla Dust			
Sabadilla alkaloids	0.80	0.78	Passed
Maxwell Insecticide Company, Inc.			
Maxwell 20% Sabadilla Dust			
Sabadilla alkaloids	0.80	0.88	Passed
W. R. Peele Company, Inc.			
Pelco 20% Sabadilla Dust			
Sabadilla alkaloids	0.80	0.80 0.81	Passed Passed
do	0.80 0.80	0.84	Passed
Taylor Chemical Co.			
Superkill 20% Sabadilla Dust			
Sabadilla alkaloidsdo	0.80 0.80	0.82 0.78	Passed Passed
Wyatt-Quarles Seed Co.			
Wyatt-Quarles 20% Sabadilla Dust			
Sabadilla alkaloids	0.80	0.96	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
The Court Court of the			
SEVIN			
Acme Quality Paints, Inc.			
Acme Sevin 50W			
Sevindo		50.79 51.50	Passed Passed
California Chemical Company-Ortho Div.			
Ortho Sevin Bean Dust			
Sevin	1.75	1.79	Passed
do		1.70	Passed
Ortho Sevin 5 Dust			
Sevin	5.00	5.24	Passed
Ortho Sevin 10 Dust			
Sevin	. 10.00	10.38	Passed
Carolina Chemicals, Inc.			
Flight Brand Sevin Bean Dust			
Sevin	1.75	1.73	Passed
Flight Brand 10% Sevin Dust			
Sevin do		10.40 9.79	Passed Passed
Daly-Herring Co.			
Dee Aitch Sevin Bean Dust			
Sevin	1.75	1.82	Passed
armers Cooperative Exchange, Inc.			
CX "7" Dust			
Sevin		1.81	Passed
do		1.77 1.88	Passed Passed
do	1.75	1.77	Passed
CX 5% Sevin Dust			
Sevin	5.00	4.79	Passed
W. R. Grace and Co. Davison Chemical Div.			
Naco 13/4 % Sevin Dust			
Sevin		1.58	Deficient
Naco 10% Sevin Dust		Terri Dun	#01-DA
Sevin	10.00	10.78	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Joro, Inc.			
Nok-Out 500 Dust		NIA35	
Sevin	5.00	5.34	Passed
Miller Chemical and Fertilizer Corp.			
Miller 7½% Sevin Dust			
Sevin	7.50	8.23	Passed
Miller 10% Sevin Insecticide Dust			lifornic Chem
Sevin	10.00	10.06	Passed
Niagara Chemical Div.			
Food Machinery and Chemical Corp.			
Niagara Sevin 5 Dust			
Sevin	5.00	7.28	Excessive
			Active Ingredient
Planters Chemical Corp.			Sovin
Planters 10% Sevin Dust		cals, Inc.	
Sevin	10.00	10.74	Passed
Rigo Manufacturing Co.			
Kill-Ko Flea Powder			
Sevin	5.00	3.80	Deficient
Stauffer Chemical Co.			
Sevin 1.75 Dust			
Sevin	1.75	2.09	Passed
towed Section Carl as a			
Taylor Chemical Co.			
Superkill 13/4 Sevin Dust Sevin	1,75	2.74	Excessive
	1.75	2.77	Active
do	1.75	1.95	Ingredient Passed
do	1.75	1.89	Passed
do	1.75	1.96	Passed
superkill 5% Sevin Dust	F 00	F 24	X 5% Sevil
Sevin	5.00 5.00	5.36 5.42	Passed Passed
uperkill Flea and Tick Powder			
Sevin	5.00		Passed
Superkill 7½% Sevin Dust			
Sevin	7.50		Passed
Superkill 10% Sevin Dust			
Sevin	10.00	10.93	Paseed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Union Carbide Chemicals Co. Division of Union Carbide Corp.			
Bull Shell on the same			
Crag Sevin Sprayable Insecticide Sevin	80.00	82.40	Passed
Woolfolk Chemical Works, Ltd.			
Security Brand Sevin Bean Dust			
Sevin	1.75 1.75 1.75	1.87 1.73 2.00	Passed Passed Passed
Security Brand Superior Quality 13/4 Sevin I	Dust		
Sevin		1.87	Passed
Security Brand 5% Sevin Garden Dust			
Sevin do	5.00 5.00	4.92 5.01	Passed Passed
	3.00	incipana (v	russeu
Security Brand 7½% Sevin Cotton Dust	7.50	8.01	Possed
do	7.50	7.63	Passed
Security Brand 10% Sevin Cotton Dust			
Sevindo	10.00 10.00	14.09 10.30	Passed Passed
SEVIN-CHLORANIL			
Polk Miller Products Corp.			
Sergeant's Ship-Flea Scratch Powder			
Sevin Chloranil	5.00 5.00	5.45 6.00	Passed
SEVIN-DICHLOROPHENE			
Hartz Mountain Products Corp.			
Hartz Mountain Flea Powder			
Sevin	5.00 0.50	5.02 0.36	Passed
SEVIN-SULFUR			
W. R. Grace and Co. Davison Chemical Div.			
Naco 13/4% Sevin-50% Sulfur			
Sevin Sulfur	1.75 50.00	2.00 49.09	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Stauffer Chemical Co.			
Stauffer Sevin Sulfur 1.75-60 Dust			
Sevin Sulfur		2.09 57.71	Passed
Sevin Sulfur 5-50 Dust			
Sevin		5.45 44.23	Deficient
SILVEX			
California Spray-Chemical Corp. (Now: California Chemical Company-Orth	o Div.)		
Ortho Chick Weed and Clover Killer			
Iso octyl ester of 2-(2,4,5-trichloro- phenoxy) propionic acid	13.80	13.40	Passed
SULFUR			
5 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1 C 1			
Rapid Chemical Co.			
Rapid-Kill Rodent Destroyer Sulfur do		38.85 39.53	Misbrande Misbrande
<b>do</b>	01.00	07.00	/ Misbrariae
THALLIUM SULFATE		ducts Corp.	
Arnott Chemical and Exterminating Co.			
Arnco Poison P-Nuts Thallium sulfate	1.00	1.02	Passed
Black Magic Co.			
Black Magic Roach, Waterbug, Ant and A Thallium sulfate		1.79	Passed
O. E. Linck Company, Inc.			
Tat Mo-Go	FUR		
Thallium sulfate	1.00	1.03	Passed
do	1.00	1.18	Passed
do		0.98	Passed Passed
do	1.00	1.08	Passed Passed
do		1.09 1.05	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
The Moster Products Co.			
Rat Stop  Thallium sulfatedo	1.00 1.00	1.07 1.15	Passed Passed
Nott Manufacturing Company, Inc.			
Nott Mole-Nots  Thallium sulfate	1.00 1.00 1.00	1.13 1.14 1.16	Passed Passed Passed
TOXAPHENE			
Toxaphene Emulsible Toxaphene	59.00	59.80	Passed
Carter Insecticide and Chemical Company,	Inc.		
Carolina Brand Toxaphene Emulsion Conce Toxaphene	entrate 60.00	63.27	Passed
Daly-Herring Co.			
Dee Aitch 20% Toxaphene Cotton Dust Toxaphene	20.00	20.57	Passed
Dee Aitch 60% Toxaphene Emulsifiable Co Toxaphene	oncentrate 60.40	61.84	Passed
Farmers Cooperative Exchange, Inc.			
FCX 20-0 Toxaphene Toxaphene	20.00	20.72	Passed
FCX Toxaphene Emulsion Concentrate  Toxaphene do do	60.00 60.00 60.00	61.57 60.81 58.58	Passed Passed Passed
Maxwell Insecticide Company, Inc.			
Maxwell Toxaphene Emulsion 60 Toxaphene		61.87	
Olin Mathieson Chemical Corp.			
Mathieson Toxaphene ''20'' Dust Toxaphene	20.00	21.00	Passed
Mathieson 6 lb. Emulsifiable Liquid Toxaphenedo	58.80 58.80	59.52 59.37	Passed Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
W. R. Peele Company, Inc.			
Pelco Toxaphene 60-E. C.			
Toxaphenedo	57.50 57.50	60.20 60.94	Passed Passed
Planters Chemical Corp.			
Planters Toxaphene 6 lb. Emulsion Conce	ntrate		
Toxaphene	60.00	62.00	Passed
do	/	61.66 62.43	Passed Passed
do		02.43	russeu
Taylor Chemical Co.			
Superkill 20% Toxaphene Dust Without	Sulfur		
Toxaphene	20.00	20.57	Passed
United Cooperatives, Inc. (Registered by Farmers Cooperative Excha	nge, Inc.)		
Unico Toxaphene Emulsion Concentrate			
Toxaphene		58.43 59.90	Passed Passed
Woolfolk Chemical Works, Ltd.			
Security Brand 20% Toxaphene Dust			
Toxophene	20.00	20.56	Passed
the same of the same of the same of the same of			
TOXAPHENE-DDT	inge, Inc.		
Acme Fertilizer Co.			
Acme Toxaphene-DDT Emulsion	20.40		Тохорьен
Toxaphene			Passed
Theoretical chlorine	36.43	35.94	
California Spray-Chemical Corp.			
(Now: California Chemical Company-Ortho			
Ortho Toxaphene-DDT 14-7 Dust			lin Mathieson
Toxaphene	14.00		Passed
DDT	7.00	12 12 aphene (12)	athluson Tox
Theoretical chlorine			
ToxapheneDDT			Passed
Theoretical chlorine		12.86	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Carolina Chemicals, Inc.			
Flight Brand Toxaphene-DDT Dust 14-7			
Toxaphene	14.00 7.00 12.88	13.13	Passed
Carolina Chemical Corp.			
Cotton Special Toxaphene DDT Theoretical chlorine	40.00 23.00 38.30	32.25	Deficient
Carter Insecticide and Chemical Company,	Inc.		
Carolina Brand Toxaphene-DDT 40-20 Emu	ulsifiable Conc	entrate	
Toxaphene DDT Theoretical chlorine	40.00 20.00 36.80	33.97	Deficient
Toxaphene DDT Theoretical chlorine	40.00 20.00 36.80	35.14	Passed
Coastal Chemical Corp.	36.60	33.14	
40% Toxaphene 20% DDT Emulsifiable Co	oncentrote		
Toxaphene	40.00 20.00 36.80	37.57	Passed
Daly-Herring Co.			
Dee Aitch 40% Toxaphene 20% DDT Emu Toxaphene DDT Theoretical chlorine	40.00 40.00 20.00 36.80		Passed
Toxaphene	40.00 20.00	37.05	Passed
Theoretical chlorine  Toxaphene  DDT	36.80 40.00 20.00	37.76	Passed
Theoretical chlorine	36.80	36.50	Mehorin Agri
Farmers Cooperative Exchange, Inc.			
FCX 20-10 Dust  Toxaphene  DDT	20.00		Passed
Theoretical chlorine	18.40		
	I-DOT 7 Dast		
Toxaphene DDT Theoretical chlorine	38.70 19.30 35.58	36.87	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
GurMiCo Chemicals, Inc.			
Toxaphene 4 DDT 2 Emulsion	7.3.1 mg 70.7		
Toxaphene			Passed
Theoretical chlorine		38.21	
Toxaphene		emisolate le	Passed
DDT			russeu
Theoretical chlorine	34.96	37.64	
Toxaphene			Passed
DDT		37.55	
Toxaphene		unitalida la	Passed
DDT			russeu
Theoretical chlorine		38.03	
Maxwell Insecticide Company, Inc.	-DOT 40-20 E		
Maxwell Toxaphene-DDT Dust			
Toxaphene	14.00		Passed
DDT	7.00		OHIGHUSIT
Theoretical chlorine	12.88	13.13	
Maxwell Toxaphene-DDT Emulsion 4-2			Theoretic
Toxaphene	00.00		Passed
Theoretical chlorine		38.04	
Toxaphene			Passed
DDT		Harris B	
Theoretical chlorine	36.80	39.02	TOO
ToxapheneDDT			Passed
Theoretical chlorine		37.67	
Toxaphene	40.00		Passed
DDT	20.00		
Theoretical chlorine		37.46	
Toxaphene			Passed
DDT		36.18	
Toxaphene			Passed
DDT	20.00		Palate
Theoretical chlorine	36.80	38.13	
Meherrin Agricultural and Chemical Co.			
Red Kay DDT-Toxaphene 7-14 Dust			
Toxaphene	14.00		Passed
DDT	7.00	10.14	
Theoretical chlorine	12.88	13.16	
Olin Mathieson Chemical Corp.			
Mathieson Toxaphene 14-DDT 7 Dust			
Toxaphene			Passed
DDT		12.94	
Theoretical chlorine	12.88	12.84	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Mathieson Toxaphene 14-DDT 7 Dust (Cor	ntinued)		
Toxaphene	14.00		Passed
DDT	7.00	14.10 9	
Theoretical chlorine	12.88	12.78	
V. R. Peele Company, Inc.			
Pelco 14-7 Toxaphene DDT Dust			
Toxaphene	14.00		Passed
DDT	7.00		
Theoretical chlorine	12.88	13.58	
Toxaphene	14.00		Passed
DDT Theoretical chlorine	7.00 12.88	13.06	
		anisalets le	
Yelco Toxaphene-DDT Emulsion Concentra Toxaphene	40.00		Passed
DDT	20.00		russeu
Theoretical chlorine	36.80	35.87	
Toxaphene	40.00		Passed
DDT Theoretical chlorine	20.00 36.80	36.08	
		30.00	100
Toxaphene	40.00 20.00		Passed
Theoretical chlorine	36.80	37.08	
Toxaphene	40.00		Passed
DDT	20.00	24.05	
Theoretical chlorine	36.80	36.05	23/Insorett
Toxaphene	40.00 20.00		Passed
Theoretical chlorine	36.80	35.98	
Toxaphene	40.00		Passed
DDT	20.00		TOO
Theoretical chlorine	36.80	37.44	
Toxaphene	40.00		Passed
Theoretical chlorine	20.00 36.80	36.89	
Toxaphene	40.00	annialità le	Passed
DDT	20.00		russeu
Theoretical chlorine	36.80	37.54	
Toxaphene	40.00		Passed
DDT Theoretical chlorine	20.00 36.80	37.03	
		37.03	TOUT
ToxapheneDDT	40.00 20.00		Passed
Theoretical chlorine	36.80	36.17	
Planters Chemical Corp.			
Planters Toxaphene-DDT Emulsion Concent			
Toxaphene	40.00		Passed
DDT	20.00	1,330	100
Theoretical chlorine	36.80	37.88	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Planters Toxaphene-DDT Emulsion Concent	trate (Continue	ophens 1.4-	
DOLL BUILDING	40.00		Passed
Toxaphene	20.00		
Theoretical chlorine	36.80	36.65	
Treatment chamber 11 - 11 - 11	20170	mpony, lac	R. Peelo Co
Toxaphene	40.00		Passed
DDT Theoretical chlorine	20.00 36.80	37.78	
100000000000000000000000000000000000000	19777	07.70	norlgoxoT
Toxaphene	40.00		Passed
DDT	20.00	27.05	
	36.80	37.05	
Toxaphene	40.00		Passed
DDT	20.00		
Theoretical chlorine	36.80	37.61	
Swift and Co.			
00.03			
Agricultural Chemical Div.			
Swift's Gold Bear VD 147D			
Toxaphene	14.00		Passed
DDT	7.00		i usseu
Theoretical chlorine	12.88	13.04	
00.00 00.00			
Swift's Gold Bear Toxaphene-DDT VD42E	90.00		Insoretica
Toxaphene	38.70		Passed
Theoretical chlorine	19.40 35.63	35.92	
THE CONTROL CHICKING	33.03	33.72	
Taylor Chemical Co.			
Superkill 14% Toxaphene 7% DDT Dust			
Toxaphene	14.00		Passed
Theoretical chlorine	7.00 12.88	12.86	
	12.00	12.00	
Toxaphene	14.00		Passed
DDT	7.00	1212	
Theoretical chlorine	12.88	13.13	
Toxaphene	14.00		Passed
DDT	7.00	anticular in	
Theoretical chlorine	12.88	13.57	
Superkill 4:2 Toxaphene-DDT			
Toxaphene	40.00		Passed
DDT	20.00		
Theoretical chlorine	36.80	37.09	
36.80 36.17			
United Cooperatives, Inc.			
Registered by Farmers Cooperative Exchange	ge, Inc.)	ical Corp.	
Unico "42" Cotton Spray			
Toxaphene	38.70		Passed
DDT	19.30		
Theoretical chlorine	35.58	36.40	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Woolfolk Chemical Works, Ltd.			
Security Brand Toxaphene-DDT 2-1 Dust			
Toxophene	14.00		Passed
Theoretical chlorine	7.00 12.88	13.13	
Security Brand Toxaphene-DDT 20-10 Dust			
Toxaphene	20.00		Passed
DDT Theoretical chlorine	10.00 18.40	18.26	
TOXAPHENE-DDT-METHYL PARATHION			
W. B. Basis Company, Inc.			
W. R. Peele Company, Inc. Pelco 2-4-5 Super Cotton Spray			
Toxaphene	40.00		Passed
DDT	20.00	4.76	Parallilan
Methyl parathion	36.80	36.56	
Toxaphene	40.00		Passed
DDT	20.00 5.00	4.77	
Theoretical chlorine	36.80	35.06	
Toxaphene	40.00 20.00		Passed
Methyl parathion	5.00 36.80	4.85 36.43	
Toxaphene	40.00	30.43	Deficient
DDT	20.00	anisolda la	Dencient
Methyl parathion	5.00 36.80	4.71 36.56	
Swift and Co.			
Agricultural Chemical Div.			
Swift's Gold Bear Super Guard 215			
Toxaphene	10.00		Passed
DDT Methyl parathion	5.00 2.50	2.45	
Theoretical chlorine	9.20	9.93	
Woolfolk Chemical Works, Ltd.			
Security Brand 3-Way Cotton Spray 4-21/2			
Toxaphene	37.70		Passed
DDT	19.00 4.80	4.96	
Theoretical chlorine	34.76	38.73	

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
TOXAPHENE-DDT-PARATHION			
Maxwell Insecticide Company, Inc.			
Maxwell 14-7-1 Cotton Dust			
Toxaphene			Passed
Parathion	1.00	1.12 13.93	
Toxaphene			Passed
Parathion	. 1.00	1.01 13.53	
W. R. Peele Company, Inc.			
Pelco 14-7-1 Toxaphene DDT Parathion			
Toxaphene			Passed
Parathion	. 1.00	1.05 13.93	
Toxaphene			Passed
Parathion Theoretical chlorine	1.00	1.08 13.25	
Taylor Chemical Co.			
Superkill 14% Toxaphene 7% DDT 1%	Parathion Dust		Methyl pa
Toxaphene			Passed
Parathion Theoretical chlorine	. 1.00	1.17 12.95	
36.80 36.56	14.00	rothion chlorine	
TOXAPHENE-MALATHION			
Agricultural Specialties		omical Div	
Star-Bar Div.			
Lintox-M Livestock Spray	42.00	44.07	Torophene
Toxaphene		44.27	Passed
TOXAPHENE-PARATHION	, Ltd.		
California Chemical Company-Ortho Div.			
Ortho Parathion-Toxaphene 2-10 Dust			
Toxaphene	10.00	10.49	Deficient

Manufacturers o	and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
California Spray-		Atlanta and a state of the stat		
	Chemical Campany-Ortha Toxaphene 2-10 Dust	Div.)		
Toxaphene	2-10 Dust	10.00	9.86	Passed
Parathion	1.501.85.	2.00	1.90	
Toxaphene Parathion		10.00	10.63	Passed
	-Toxaphene 2-20 Dust	1110190	1300	Toxonbon
Toxaphene Parathion		20.00	19.72	Passed
W. R. Grace and Davison Chemica				
Naco 2% Parath	nion and 10% Toxaphene	Dust		
Toxaphene Parathion		10.00 2.00	10.29	Passed
Toxaphene Parathion	20.0030.29	10.00 2.00	10.14 2.02	Passed
Mike, Inc.	20.00 20.86	0.000		
	leading Cabbage Dust with	Toxaphene	9.72	D-6:-:
Parathion		1.50	1.23	Deficient
Toxaphene Parathion	20.00	10.00 1.50	9.93 1.55	Passed
Southern Agricul	tural Insecticides, Inc.			
	Heading Cabbage Dust wi	th Toxaphene		
Toxaphene Parathion	2.00	10.00	11.13	Passed
Toxaphene Parathion		10.00	10.72 1.71	Passed
Toxaphene Parathion		10.00 1.50	10.79 1.53	Passed
Toxaphene Parathion	0.025100 00.002	10.00 1.50	10.72 1.68	Passed
Toxaphene Parathion		10.00 1.50	10.43	Passed
Toxaphene Parathion	P20.0:8co.0	10.00 1.50	10.14 1.59	Passed
Toxaphene Parathion		10.00	10.42 1.65	Passed
Toxaphene Parathion	0.025 0.030	10.00	10.86 1.64	Passed
Toxaphene Parathion		10.00 1.50	10.72 1.63	Passed
Toxaphene Parathion	ive Plend LX 3-201.0.6.	10.00 1.50	11.13	Passed

10.00 1.50 1.50	10.78 1.51 10.64	Passed
1.50	1.51	Passed
	10.64	
	1.85	Passed
10.00 1.50	10.29 1.76	Passed
10.00	10.43	Passed
20.00 2.00	20.28	Passed
20.00 2.00	19.72 2.13	Passed
20.00 2.00	20.00	Passed
20.00 2.00	20.29	Passed
20.00 2.00	20.86 2.05	Passed
20.00 2.00	20.28 2.13	Passed
20.00 2.00	20.14 2.48	Passed
20.00	19.14 1.99	Passed
20.00	20.29	Passed
0.025	0.025	Passed
Div.)		
0.025	0.024	Passed
0.020	0.02	Toxaghan
0.025	0.030	Passed
Blend LX 3-2 0.025	0.033	
	20.00 2.00 0.025 <b>Div.</b> ) 0.025 Blend LX 3-2	20.00 20.29 2.00 2.01 0.025 0.025  Div.)  0.025 0.024  0.025 0.030  Blend LX 3-2-1

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
d-Con Mouse Prufe			
Warfarin (sodium salt)	0.054	0.054	Passed
do	0.054	0.054	Passed
do	0.054	0.052	Passed
Dun-Win Company and Gould's "Dell" Prod	lucts		
Flavorized Rat Kakes with Warfarin			
Warfarin	0.025	0.030	Passed
Hess and Clark			
Division of Richardson-Merrell, Inc.			
New! Improved! Warfarat			
	0.025	0.032	Passed
b60054 08.98 00.08		12010	Reurse
Dr. LeGear, Inc.			
Dr. LeGear Warfarin Mouse Killer			
Warfarin	0.050	0.058	
do	0.050	0.052	Passed
Linen White Products Company, Inc.			
Pestex contains Warfarin			
Warfarin	0.025	0.032	Passed
The Master Products Co.			
Rat Buster			
Warfarin	0.025	0.030	Passed
do	0.025	0.028	Passed
Pearson and Co.			
Red-1-Cat Water Soluble Warfarin			
Warfarin (sodium salt)	0.540	0.620	Passed
Wariami (sociam sait)	0.540	0.020	russeu
eacoast Laboratories, Inc.			
Twin Light Rat-Bait			
Warfarin		0.027	
ZINEB			
Niagara Chemical Div.			
Food, Machinery and Chemical Corp.			
Niagara Zineb 6.5 Dust			
Zineb	6.50	6.44	Passed
			and the second second second

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
W. R. Peele Company, Inc.			
Pelco Dithane Dust Zineb	6.50	6.60	Passed
MISCELLANEOUS INORGANIC			
American Cyanamid Co.			
Cyanogas Ant Killer Calcium cyanide	42.00	45.73	Passed
Mahaffey Co.			
New Improved Mahaffey Roach Powder Borax	60.00	69.60	Passed
MISCELLANEOUS ORGANIC			
Boyle-Midway, Inc.			
Black Flag Powder Lethane A-70	7.00	5.84	Deficient
California Chemical Company-Ortho Div.			
Ortho Thiodan 3 Dust			
Thiodan	3.00	3.34	Passed
Chemagro Corp.			
Guthion Liquid Concentrate Crop Insecticide		22.57	D I
Guthion	22.20	23.56	Passed
The Dill Co.			
Dill's All-Over Flea Powder  Lethane 60	2.00	2.33	Passed
	D.V.		Cwin Light Rot
Geigy Agricultural Chemicals Division Geigy Chemical Corp.			
Geigy Diazinon 25E			
Diazinon	25.00	25.10	Passed
Hess and Clark Division of Richardson-Merrell, Inc.			
Dip and Disinfectant			
Coal tar phenols  Neutral oil	14.00 56.00	15.58 57.70	Passed

Manufacturers and Brands	Guaranteed Per Cent	Found Per Cent	Decisions
Miller Chemical and Fertilizer Corp.			
Mico-Fume Tobacco Plant Bed Fumigant			
Mylone	25.50	27.04	Passed
Ralston Purina Co.			
Purina Insect Oil Concentrate			
Pentachlorophenol	30.70 5.00		Passed
Other chlorophenols Total chlorine	4.40 25.35	25.00	
Purina Maggot Killer			
Kepone	20.00	20.69	Passed
Purina Baytex Spray Concentrate Insecticide			
Baytex	46.10	52.75	Passed
Stauffer Chemical Co.			
Stauffer VAPAM			
Vapam	32.70	32.22	Passed
Stauffer Trithion 2 Dust			
Trithion	2.00	3.00	Excessive Active Ingredient
United Cooperatives, Inc. (Registered by Farmers Cooperative Exchange	, Inc.)		
Unico 3* Estate Milcide			
Capryl	6.00	8.57	Passed
Virginia-Carolina Chemical Corp.			
V-C Bacats			
N-alkyl(98% C <sub>12</sub> ,2% C <sub>14</sub> )dimethyl (1-methyl napthyl) ammonium chlori		24.42	Deficient
monohydrate	37.50	34.62	Deficient

Found Per Cent Decisions	Guarantee Per Cent	
		Miller Chemical and Fertilizer Corp.
27.04 Possed	25.50	Mico-Fume Tobacco Plant Bed Fumigant Mylane
		Puring Insect Oil Concentrate
Possed	30.70	
		Chloro o-phenyl phenol
25.00		
New Proposed Middle De Bo		
20.69 Pussed	20.00	
	4	Purina Baytex Spray Concentrate Insecticida
	01.640	
		Stauffer VAPAM
32.22 Possed	32.70	Vopom
3.00 Excessive	2.00	Trithion
Active		
	ge, Inc.)	United Cooperatives, Inc. (Registered by Farmers Cooperative Exchan
		Unico 3* Estate Milcide
8.57 Possed	6.00	Capryl
		Virginia-Carolina Chemical Corp.
		V-C Bocots
		N-alkyl(98% C <sub>121</sub> 2% C <sub>14</sub> )dimethyl
34.62 Deficient		(1-methyl napthyl) ammonium chla manahydrate



